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JOURNAL OF PROCEEDINGS AND ADDRESSES
OF THE
NATIONAL EDUCATION ASSOCIATION

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NATIONAL EDUCATION ASSOCIATION

of the
United
States

Proceedings
vol 47

Journal

OF

Proceedings and Addresses

OF THE

FORTY-SEVENTH ANNUAL MEETING

HELD AT

DENVER, COLORADO

JULY 3-9

1909

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Published by the Association
SECRETARY'S OFFICE, WINONA, MINN.

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NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

1857-1870

THE NATIONAL TEACHERS ASSOCIATION

Organized August 26, 1857, at Philadelphia, Pennsylvania.

PURPOSE—*To elevate the character and advance the interests of the profession of teaching, and to promote the cause of popular education in the United States.*

The name of the association was changed at Cleveland, Ohio, on August 15, 1870, to the "National Educational Association."

1870-1907

NATIONAL EDUCATIONAL ASSOCIATION

Incorporated under the laws of the District of Columbia, February 24, 1886, under the name, "National Education Association," which was changed to "National Educational Association," by certificate filed November 6, 1886.

1907-

NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

Incorporated under a special act of Congress, approved June 30, 1906, to succeed the "National Educational Association." The charter was accepted and by-laws were adopted at the Fiftieth Anniversary Convention held July 10, 1907, at Los Angeles, California.

ACT OF INCORPORATION

AN ACT TO INCORPORATE THE NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled:

SECTION 1. That the following named persons, who are now officers and directors and trustees of the National Educational Association, a corporation organized in the year eighteen hundred and eighty-six, under the Act of General Incorporation of the Revised Statutes of the District of Columbia, viz.: Nathan C. Schaeffer, Eliphalet Oram Lyte, John W. Lansinger, of Pennsylvania; Isaac W. Hill, of Alabama; Arthur J. Matthews, of Arizona; John H. Hineman, George B. Cook, of Arkansas; Joseph O'Connor, Josiah L. Pickard, Arthur H. Chamberlain, of California; Aaron Gove, *Ezekiel H. Cook, Lewis C. Greenlee, of Colorado; Charles H. Keyes, of Connecticut; George W. Twitmyer, of Delaware; J. Ormond Wilson, William T. Harris, Alexander T. Stuart, of the District of

* Deceased.

Columbia; Clem Hampton, of Florida; William M. Slaton, of Georgia; Frances Mann, of Idaho; J. Stanley Brown, *Albert G. Lane, Charles I. Parker, John W. Cook, Joshua Pike, Albert R. Taylor, Joseph A. Mercer, of Illinois; Nebraska Crospey, Thomas A. Mott, of Indiana; John D. Benedict, of Indian Territory; John F. Riggs, Ashley V. Storm, of Iowa; John W. Spindler, Jasper N. Wilkinson, A. V. Jewett, Luther D. Whittemore, of Kansas; William Henry Bartholomew, of Kentucky; Warren Easton, of Louisiana; *John S. Locke, of Maine; M. Bates Stephens, of Maryland; Charles W. Eliot, *Mary H. Hunt, Henry T. Bailey, of Massachusetts; Hugh A. Graham, Charles G. White, William H. Elson, of Michigan; *William F. Phelps, Irwin Shepard, John A. Cranston, of Minnesota; Robert B. Fulton, of Mississippi; *F. Louis Soldan, James M. Greenwood, William J. Hawkins, of Missouri; Oscar J. Craig, of Montana; George L. Towne, of Nebraska; Joseph E. Stubbs, of Nevada; James E. Klock, of New Hampshire; James M. Green, John Enright, of New Jersey; Charles M. Light, of New Mexico; *James H. Canfield, Nicholas Murray Butler, William H. Maxwell, Charles R. Skinner, *Albert P. Marble, James C. Byrnes, of New York; James Y. Joyner, Julius Isaac Foust, of North Carolina; Pitt Gordon Knowlton, of North Dakota; Oscar T. Corson, Jacob A. Shawan, Wells L. Griswold, of Ohio; Edgar S. Vaught, Andrew R. Hickham, of Oklahoma; Charles Carroll Stratton, Edwin D. Ressler, of Oregon; Thomas W. Bicknell, Walter Ballou Jacobs, of Rhode Island; David B. Johnson, Robert P. Pell, of South Carolina; Moritz Adelbert Lange, of South Dakota; Eugene F. Turner, of Tennessee; Lloyd E. Wolfe, of Texas; David H. Christensen, of Utah; Henry O. Wheeler, Isaac Thomas, of Vermont; Joseph L. Jarman, of Virginia; Edward T. Mathes, of Washington; T. Marcellus Marshall, Lucy Robinson, of West Virginia; Lorenzo D. Harvey, of Wisconsin; Thomas T. Tynan, of Wyoming; Cassia Patton, of Alaska; Frank H. Ball, of Porto Rico; Arthur F. Griffiths, of Hawaii; C. H. Maxson, of the Philippine Islands, and such other persons as now are or may hereafter be associated with them as officers or members of said Association, are hereby incorporated and declared to be a body corporate of the District of Columbia by the name of the "National Education Association of the United States," and by that name shall be known and have perpetual succession with the powers, limitations, and restrictions herein contained.

SEC. 2. That the purpose and object of the said corporation shall be to elevate the character and advance the interests of the profession of teaching, and to promote the cause of education in the United States. This corporation shall include the National Council of Education and the following departments, and such others as may hereafter be created by organization or consolidation, to wit: the Departments, first, of Superintendence; second, of Normal Schools; third, of Elementary Education; fourth, of Higher Education; fifth, of Manual Training; sixth, of Art Education; seventh, of Kindergarten Education; eighth, of Music Education; ninth, of Secondary Education; tenth, of Business Education; eleventh, of Child-Study; twelfth, of Physical Education; thirteenth, of Natural Science Instruction; fourteenth, of School Administration; fifteenth, the Library Department; sixteenth, of Special Education; seventeenth, of Indian Education; the powers and duties and the number and names of these departments and of the National Council of Education may be changed or abolished at the pleasure of the corporation, as provided in its By-Laws.

SEC. 3. That the said corporation shall further have power to have and to use a common seal, and to alter and change the same at its pleasure; to sue or to be sued in any court of the United States, or other court of competent jurisdiction; to make by-laws not inconsistent with the provisions of this act or of the constitution of the United States; to take or receive, whether by gift, grant, devise, bequest, or purchase, any real or personal estate, and to hold, grant, convey, hire, or lease the same for the purposes of its incorporation; and to accept and administer any trust of real or personal estate for any educational purpose within the objects of the corporation.

SEC. 4. That all real property of the corporation within the District of Columbia,

* Deceased

which shall be used by the corporation for the educational or other purposes of the corporation as aforesaid, other than the purposes of producing income, and all personal property and funds of the corporation held, used, or invested for educational purposes aforesaid, or to produce income to be used for such purposes, shall be exempt from taxation; *provided*, however, That this exemption shall not apply to any property of the corporation which shall not be used for, or the income of which shall not be applied to, the educational purposes of the corporation; and, *provided further*, That the corporation shall annually file, with the Commissioner of Education of the United States, a report in writing, stating in detail the property, real and personal, held by the corporation, and the expenditure or other use or disposition of the same, or the income thereof, during the preceding year.

SEC. 5. That the membership of the said corporation shall consist of three classes of members—viz., active, associate, and corresponding—whose qualifications, terms of membership, rights, and obligations shall be prescribed by the By-Laws of the corporation.

SEC. 6. That the officers of the said corporation shall be a President, twelve Vice-Presidents, a Secretary, a Treasurer, a Board of Directors, an Executive Committee, and a Board of Trustees.

The Board of Directors shall consist of a President, the First Vice-President, the Secretary, the Treasurer, the chairman of the Board of Trustees, and one additional member from each state, territory, or district, to be elected by the active members for the term of one year, or until their successors are chosen, and of all life directors of the National Educational Association. The United States Commissioner of Education, and all former Presidents of the said Association now living, and all future Presidents of the Association hereby incorporated, at the close of their respective terms of office, shall be members of the Board of Directors for life. The Board of Directors shall have power to fill all vacancies in their own body; shall have in charge the general interests of the corporation, excepting those herein intrusted to the Board of Trustees; and shall possess such other powers as shall be conferred upon them by the By-Laws of the corporation.

The Executive Committee shall consist of five members, as follows: the President of the Association, the First Vice-President, the Treasurer, the Chairman of the Board of Trustees, and a member of the Association, to be chosen annually by the Board of Directors, to serve one year. The said committee shall have authority to represent, and to act for, the Board of Directors in the intervals between the meetings of that body, to the extent of carrying out the legislation adopted by the Board of Directors under general directions as may be given by said board.

The Board of Trustees shall consist of four members, elected by the Board of Directors for the term of four years, and the President of the Association, who shall be a member *ex officio*, during his term of office. At the first meeting of the Board of Directors, held during the annual meeting of the Association at which they were elected, they shall elect one trustee for the term of four years. All vacancies occurring in said Board of Trustees, whether by resignation or otherwise, shall be filled by the Board of Directors for the unexpired term; and the absence of a trustee from two successive annual meetings of the board shall forfeit his membership.

SEC. 7. That the invested fund now known as the "Permanent Fund of the National Educational Association," when transferred to the corporation hereby created, shall be held by such corporation as a Permanent Fund and shall be in charge of the Board of Trustees, who shall provide for the safekeeping and investment of such fund, and of all other funds which the corporation may receive by donation, bequest, or devise. No part of the principal of such Permanent Fund or its accretions shall be expended, except by a two-thirds vote of the active members of the Association present at any annual meeting, upon the recommendation of the Board of Trustees, after such recommendation has been approved by vote of the Board of Directors, and after printed notice of the proposed expenditure has been mailed to all active members of the Association. The income of the Permanent Fund shall be used only to meet the cost of maintaining the organization of the

Association and of publishing its annual volume of *Proceedings*, unless the terms of the donation, bequest, or devise shall otherwise specify, or the Board of Directors shall otherwise order. It shall also be the duty of the Board of Trustees to issue orders on the Treasurer for the payment of all bills approved by the Board of Directors, or by the President and Secretary of the Association acting under the authority of the Board of Directors. When practicable, the Board of Trustees shall invest, as part of the Permanent Fund, all surplus funds exceeding five hundred dollars that shall remain in the hands of the Treasurer after paying the expenses of the Association for the previous year, and providing for the fixed expenses and for all appropriations made by the Board of Directors for the ensuing year.

The Board of Trustees shall elect the Secretary of the Association, who shall also be secretary of the Executive Committee, and shall fix the compensation and the term of his office for a period not to exceed four years.

SEC. 8. That the principal office of the said corporation shall be in the city of Washington, District of Columbia, provided that the meetings of the corporation, its officers, committees, and departments, may be held, and that its business may be transacted, and an office or offices may be maintained, elsewhere, within the United States, as may be determined, by the Board of Directors, or otherwise in accordance with the By-Laws.

SEC. 9. That the Charter, Constitution, and By-Laws of the National Educational Association shall continue in full force and effect until the charter granted by this act shall be accepted by such Association at the next annual meeting of the Association, and until new By-Laws shall be adopted; and that the present officers, directors, and trustees of said Association shall continue to hold office and perform their respective duties as such until the expiration of terms for which they were severally elected or appointed, and until their successors are elected. That at such annual meeting the active members of the National Educational Association, then present, may organize and proceed to accept the charter granted by this Act and adopt By-Laws, to elect officers to succeed those whose terms have expired or are about to expire, and generally to organize the "National Educational Association of the United States;" and that the Board of Trustees of the corporation hereby incorporated shall thereupon, if the charter granted by this Act be accepted, receive, take over, and enter into possession, custody, and management of all property, real and personal, of the corporation heretofore known as the National Educational Association, incorporated as aforesaid, under the Revised Statutes of the District of Columbia and all its rights, contracts, claims, and property of every kind and nature whatsoever, and the several officers, directors, and trustees of such last-named Association, or any other person having charge of any of the securities, funds, books, or property thereof, real or personal, shall on demand deliver the same to the proper officers, directors, or trustees of the corporation hereby created. *Provided*, That a verified certificate executed by the presiding officer and secretary of such annual meeting, showing the acceptance of the charter granted by this act by the National Educational Association shall be legal evidence of the fact, when filed with the Recorder of Deeds of the District of Columbia; and, *provided further*, That in the event of the failure of the Association to accept the charter granted by this act at said annual meeting then the charter of the National Educational Association and its corporate existence shall be, and are hereby extended until the thirty-first day of July, nineteen hundred and eight, and at any time before said date its charter may be extended in the manner and form provided by the general corporation law of the District of Columbia.

SEC. 10. That the rights of creditors of the said existing corporation, known as the National Educational Association, shall not in any manner be impaired by the passage of this act, or the transfer of the property heretofore mentioned, nor shall any liability or obligation, or the payment of any sum due or to become due, or any claim or demand, in any manner, or for any cause existing against the said existing corporation, be released or impaired; and the corporation hereby incorporated is declared to succeed to the obligations and liabilities, and to be held liable to pay and discharge all of the debts, liabilities,

and contracts of the said corporation so existing, to the same effect as if such new corporation had itself incurred the obligation or liability to pay such debt or damages, and no action or proceeding before any court or tribunal shall be deemed to have abated or been discontinued by reason of this act.

SEC. 11. That Congress may from time to time alter, repeal, or modify this act of incorporation, but no contract or individual right made or acquired shall thereby be divested or impaired.

Approved June 30, 1906.

Accepted and adopted as the Constitution of the National Education Association of the United States by the active members of the National Educational Association in annual session at Los Angeles, Cal., July 10, 1907.

BY-LAWS

(Adopted at meeting of active members held in Los Angeles, Cal., July 10, 1907.)

ARTICLE I—MEMBERSHIP

ACTIVE MEMBERS

SECTION 1. Teachers and all who are actively associated with the management of educational institutions, including libraries and educational publications, may become active members.

SEC. 2. Any eligible person may become an active member upon application indorsed by two active members, and the payment of an enrollment fee of two dollars and the annual dues for the current year.

SEC. 3. Active members only shall have the right to vote and to hold office in the Association, in the National Council of Education, or in the several departments.

SEC. 4. All active members shall pay annual dues of two dollars, and shall be entitled to the volume of *Proceedings* without "coupon" or other conditions.

SEC. 5. The annual membership fee shall be payable at the time of the annual convention, or by remittance to the Secretary before September first of each year.

SEC. 6. Any active member may discontinue membership by giving written notice to the Secretary before September first in any year, and may restore the same only on payment of the enrollment fee of two dollars and the annual dues for the current year. A written application for active membership shall constitute an agreement to continue such membership and pay annual dues, unless written notice of discontinuance is sent to the Secretary before September first of the fiscal year for which such discontinuance shall apply.

CORRESPONDING MEMBERS

SEC. 7. Eminent educators not residing in America may be elected by the Board of Directors to be corresponding members. The number of corresponding members shall at no time exceed fifty.

SEC. 8. Corresponding members shall be entitled to the volume of *Proceedings* without the payment of fees or other conditions.

ASSOCIATE MEMBERS

SEC. 9. Any person on paying an annual membership of two dollars may become an associate member.

SEC. 10. Associate members may receive the volume of *Proceedings* in accordance with the usual "coupon" conditions, as printed on the membership certificate.

LIFE MEMBERS

SEC. 11. All life members and life directors shall be denominated active members and shall enjoy all the powers and privileges of such members without the payment of annual dues.

ROLL OF MEMBERS

SEC. 12. The names of active, life, and corresponding members only shall be printed in the annual *Yearbook*, with their respective educational titles, offices, and addresses, and the list shall be revised annually by the Secretary of the Association.

ARTICLE II—OFFICERS AND COMMITTEES

SECTION 1. The President, Vice-Presidents, Directors, and Treasurer shall be chosen by the active members of the Association by ballot, unless otherwise ordered, on the third day of each annual session, a majority of the votes cast being necessary to a choice. They shall continue in office until the close of the annual session subsequent to their election and until their successors are chosen, except as hereinafter provided.

COMMITTEE ON RESOLUTIONS

SEC. 2. At the first session of each annual meeting of the Association the President shall appoint a Committee on Resolutions.

COMMITTEE ON NOMINATIONS

SEC. 3. At the third session of each annual meeting of the Association there shall be appointed by the President a Committee on Nominations, consisting of one member from each state and territory represented. Such a committee shall be appointed by the President on the nomination of a majority of the active members from such state or territory present at the meeting called for the purpose of making such nomination; *provided*, however, That such appointment shall be made by the President without such nomination, when the active members in attendance from any state or territory shall fail to make a nomination.

SEC. 4. The meetings of the active members of the several states to nominate members of the nominating committee shall be held at 5:30 P. M. on the first day of the annual meeting of the Association, at such places as shall be announced in the general program.

ARTICLE III—DUTIES OF OFFICERS

THE PRESIDENT

SECTION 1. The President shall preside at all meetings of the Association and of the Board of Directors, and shall perform the duties usually devolving upon a presiding officer. In his absence the first Vice-President in order, who is present, shall preside; and in the absence of all the Vice-Presidents, a *pro tempore* chairman shall be appointed on nomination, the Secretary putting the question.

THE SECRETARY

SEC. 2. The Secretary shall keep a full and accurate report of the proceedings of the general meetings of the Association and of all meetings of the Board of Directors, and shall conduct such correspondence and transact such other business of the Association as the directors or Executive Committee may assign, and shall have his records present at all meetings of the Association and the Board of Directors.

THE TREASURER

SEC. 3. The Treasurer shall receive, and under the direction of the Board of Trustees hold in safekeeping, the current income of the Association; shall expend the same only upon order of said board; shall keep an exact account of his receipts and expenditures, with vouchers for the latter; which accounts, ending the first day of July in each year, he shall render to the Board of Trustees and, when approved by said board, he shall report to the Board of Directors. The Treasurer shall give such bond for the faithful discharge of his duties as may be required by the Board of Trustees; and he shall continue in office until the first meeting of the Board of Directors held prior to the annual meeting of the Association next succeeding that at which he is elected, and until his successor has been elected and has qualified.

AUDITOR OF ACCOUNTS

SEC. 4. It shall be the duty of the President, Secretary, and Treasurer of the Association to appoint annually some competent person to examine the securities of the Permanent Fund held by the Board of Trustees, and his certificate, showing the condition of the said fund, shall be attached to the annual report of the Board of Trustees.

CERTIFICATION OF BILLS

SEC. 5. The President and Secretary shall certify to the Board of Trustees all bills approved by the Board of Directors.

ARTICLE IV—THE BOARD OF DIRECTORS

SECTION 1. The Board of Directors shall hold its regular annual meeting at the place of the annual convention, and not less than two hours before the assembling of the Association.

SEC. 2. Special meetings may be held at such other times and places as the board or the President shall determine.

SEC. 3. Each new board shall organize at the session of its election.

ARTICLE V—THE NATIONAL COUNCIL OF EDUCATION

OBJECTS AND DUTIES

SECTION 1. The National Council of Education shall have for its object the consideration and discussion of educational questions of public and professional interest; the proposal to the Board of Directors, from time to time, of suitable subjects for investigation and research, and the recommendation of the amount of appropriations that should be made for such purposes; the appointment and general supervision of such special committees of investigation and research as may be provided for and authorized by the Board of Directors of the Association; the consideration, discussion, and recommendation to the Board of Directors for disposition of all reports by such special committees of research as may have been appointed on its recommendation or by its authority; the annual preparation and presentation to the Association at its annual convention of a report on "Educational Progress during the Past Year;" and in other ways shall use its best efforts to further the objects of the Association and to promote the cause of education in general.

MEMBERSHIP OF THE COUNCIL

SEC. 2.* The Council shall consist of one hundred and twenty members, selected from the membership of the Association. Any member of the Association identified with educational work is eligible to membership in the Council.

SEC. 3.* The Board of Directors shall annually elect ten members, and the Council shall elect ten members, each member to serve for six years, or until his successor is elected. At the meeting of 1908 enough additional members shall be elected in the same manner to make the total number of members one hundred and twenty. The terms of the members so elected shall expire as follows: one-sixth in one year, one-sixth in two years, one-sixth in three years, one-sixth in four years, one-sixth in five years, one-sixth in six years.

SEC. 4.* The annual election of members of the Council shall be held in connection with the annual meetings of the Association. If the Board of Directors shall fail, for any reason, to fill its quota of members annually, the vacancy or vacancies shall be filled by the Council.

SEC. 5. The absence of a member from two consecutive annual meetings of the Council shall be considered equivalent to resignation of membership, and the Council shall fill vacancies caused by absence from the Council as herein defined, as well as vacancies caused by death or resignation, for the unexpired term. All persons who have belonged to the Council shall, on the expiration of their membership, become honorary members,

* As amended at meeting of active members held at Cleveland, Ohio, July 1, 1908.

with the privilege of attending its regular sessions and participating in its discussions. No state shall be represented in the Council by more than eight members.

BY-LAWS OF THE COUNCIL

SEC. 6. The Council may establish by-laws for its government not inconsistent with the Act of Incorporation or with the By-Laws of the Association, provided such by-laws shall be submitted to, and approved by, the Board of Directors of the Association before they shall become operative.

ARTICLE VI—DEPARTMENTS

SECTION 1. A department shall consist of those members of the Association who are especially interested in the consideration of a particular group of educational problems. Each department shall be administered by a president, vice-president, secretary, and such other officers as it shall deem necessary to conduct its affairs.

SEC. 2. Each department shall hold its annual meeting at the time of the annual convention of the Association, except the Department of Superintendence, which may hold its annual meeting in February of each year, or at such other time as may be determined by the officers of said department.

SEC. 3. The objects of the annual department meetings shall be the discussion of questions pertaining to their respective fields of educational work. The programs of these meetings shall be organized and conducted by the respective presidents, in conference with, and under the general direction of, the President of the Association. Each department shall be limited to two sessions, with formal programs, at the time of the annual convention, except that a third session for business or informal round-table conference may be held at the discretion of the department officers.

SEC. 4. Upon the written request of twenty active members of the Association for permission to establish a new department, the Board of Directors may grant such permission. Such new department shall in all respects be entitled to the same rights and privileges as the departments named in the Act of Incorporation.

ARTICLE VII—MEETINGS

SECTION 1. The annual meeting of the Association shall be held at such time and place as shall be determined by the Board of Directors.

SEC. 2. Special meetings may be called by the President at the request of five directors.

SEC. 3. Any department of the Association may hold a special meeting at such time and place as by its own regulations it shall appoint.

SEC. 4. No paper, lecture, or address shall be read before the Association or any of its departments, in the absence of its author, nor shall any such paper, lecture, or address be published in the volume of *Proceedings*, without the consent of the Association, upon the approval of the Executive Committee.

ARTICLE VIII—AMENDMENTS

SECTION 1. These by-laws may be altered or amended at any annual meeting by the unanimous vote of the members present; or by a two-thirds vote of the members present, provided that the substance of the alteration or amendment has been proposed in writing at a previous annual meeting.

NATIONAL EDUCATIONAL ASSOCIATION

NOW KNOWN AS THE

NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

CERTIFICATE

of Acceptance of Charter and Adoption of By-Laws under Act of Congress approved June 30, 1906.

We, the undersigned, Nathan C. Schaeffer, the presiding officer, and Irwin Shepard, the secretary of the meeting of the National Educational Association held at Los Angeles, California, on the 10th day of July, 1907, said meeting being the annual meeting of the Association held next after the passage of an Act of Congress entitled "An Act to Incorporate the National Education Association of the United States;"

Do hereby certify, that at said meeting held pursuant to due notice, a quorum being present, the said Association adopted resolutions of which true copies are hereto attached, and accepted the Charter of the National Education Association of the United States, granted by said Act of Congress, and adopted by-laws as provided in said act and elected officers; and the undersigned pursuant to said resolutions

Do hereby certify that the National Education Association of the United States has duly accepted said Charter granted by said Act of Congress, and adopted by-laws, and is the lawful successor to the National Educational Association.

In witness whereof, we have hereunto signed our names this 20th day of August, 1907.

(Signed) NATHAN C. SCHAEFFER, *Presiding Officer*.

(Signed) IRWIN SHEPARD, *Secretary*.

VERIFICATION

RESOLUTIONS ADOPTED BY THE ACTIVE MEMBERS, JULY 10, 1907

1. *Resolved*, That the National Educational Association hereby accepts the Charter granted by an act of Congress entitled "An Act to Incorporate the National Education Association of the United States," passed June 30, 1906, and that the President and Secretary of this meeting be authorized and directed to execute and file with the Recorder of Deeds of the District of Columbia a verified certificate showing the acceptance by the Association of the Charter granted by said act.

2. *Resolved*, That the proposed by-laws of which notice was given at the annual meeting of the Association held on July 6, 1905, which are printed in full in the journal of said meeting, be and the same are hereby adopted to take effect immediately.

3. *Resolved*, That the Association adopt as its corporate seal a circle containing the title "National Education Association of the United States," and the dates "1857-1907."

4. *Resolved*, That the Association do now proceed to elect officers, and to organize under the Charter granted by the Act of Congress.

Filed in the office of the Recorder of Deeds of the District of Columbia, September 4, 1907.

CALENDAR OF MEETINGS

NATIONAL TEACHERS ASSOCIATION

1857—PHILADELPHIA, PA. (Organized)

JAMES L. ENOS, Chairman.
W. E. SHELDON, Secretary.

1858—CINCINNATI, OHIO

Z. RICHARDS, President.
J. W. BULKLEY, Secretary.
A. J. RICKOFF, Treasurer.

1859—WASHINGTON, D. C.

A. J. RICKOFF, President.
J. W. BULKLEY, Secretary.
C. S. PENNELL, Treasurer.

1860—BUFFALO, N. Y.

J. W. BULKLEY, President.
Z. RICHARDS, Secretary.
O. C. WIGHT, Treasurer.

1861, 1862—No session.

1863—CHICAGO, ILL.

JOHN D. PHILBRICK, President.
JAMES CRUIKSHANK, Secretary.
O. C. WIGHT, Treasurer.

1870—CLEVELAND, OHIO

DANIEL B. HAGAR, President.
A. P. MARBLE, Secretary.
W. E. CROSBY, Treasurer.

NAME CHANGED TO

NATIONAL EDUCATIONAL ASSOCIATION

1871—ST. LOUIS, MO.

J. L. PICKARD, President.
W. E. CROSBY, Secretary.
JOHN HANCOCK, Treasurer.

1872—BOSTON, MASS.

E. E. WHITE, President.
S. H. WHITE, Secretary.
JOHN HANCOCK, Treasurer.

1873—ELMIRA, N. Y.

B. G. NORTHROP, President.
S. H. WHITE, Secretary.
JOHN HANCOCK, Treasurer.

1874—DETROIT, MICH.

S. H. WHITE, President.
A. P. MARBLE, Secretary.
JOHN HANCOCK, Treasurer.

1875—MINNEAPOLIS, MINN.

W. T. HARRIS, President.
M. R. ABBOTT, Secretary.
A. P. MARBLE, Treasurer.

1876—BALTIMORE, MD.

W. F. PHELPS, President.
W. D. HENKLE, Secretary.
A. P. MARBLE, Treasurer.

1864—OGDENSBURG, N. Y.

W. H. WELLS, President.
DAVID N. CAMP, Secretary.
Z. RICHARDS, Treasurer.

1865—HARRISBURG, PA.

S. S. GREENLEAF, President.
W. E. SHELDON, Secretary.
Z. RICHARDS, Treasurer.

1866—INDIANAPOLIS, IND.

J. P. WICKERSHAM, President.
S. H. WHITE, Secretary.
S. P. BATES, Treasurer.

1867—No session.

1868—NASHVILLE, TENN.

J. M. GREGORY, President.
L. VAN BOKKELEN, Secretary.
JAMES CRUIKSHANK, Treasurer.

1869—TRENTON, N. J.

L. VAN BOKKELEN, President.
W. E. CROSBY, Secretary.
A. L. BARBER, Treasurer.

1877—LOUISVILLE, KY.

M. A. NEWELL, President.
W. D. HENKLE, Secretary.
J. ORMOND WILSON, Treasurer.

1878—No session.

1879—PHILADELPHIA, PA.

JOHN HANCOCK, President.
W. D. HENKLE, Secretary.
J. ORMOND WILSON, Treasurer.

1880—CHAUTAUQUA, N. Y.

J. ORMOND WILSON, President.
W. D. HENKLE, Secretary.
E. T. TAPPAN, Treasurer.

1881—ATLANTA, GA.

JAMES H. SMART, President.
W. D. HENKLE, Secretary.
E. T. TAPPAN, Treasurer.

1882—SARATOGA SPRINGS, N. Y.

G. J. ORR, President.
W. E. SHELDON, Secretary.
H. S. TARBELL, Treasurer.

1883—SARATOGA SPRINGS, N. Y.

E. T. TAPPAN, President.
W. E. SHELDON, Secretary.
N. A. CALKINS, Treasurer.

- 1884—MADISON, WIS.
THOMAS W. BICKNELL, President.
H. S. TARBELL, Secretary.
N. A. CALKINS, Treasurer.
- 1885—SARATOGA SPRINGS, N. Y.
F. LOUIS SOLDAN, President.
W. E. SHELDON, Secretary.
N. A. CALKINS, Treasurer.
- 1886—TOPEKA, KAN.
N. A. CALKINS, President.
W. E. SHELDON, Secretary.
E. C. HEWETT, Treasurer.
- 1887—CHICAGO, ILL.
W. E. SHELDON, President.
J. H. CANFIELD, Secretary.
E. C. HEWETT, Treasurer.
- 1888—SAN FRANCISCO, CAL.
AARON GOVE, President.
J. H. CANFIELD, Secretary.
E. C. HEWETT, Treasurer.
- 1889—NASHVILLE, TENN.
ALBERT P. MARBLE, President.
J. H. CANFIELD, Secretary.
E. C. HEWETT, Treasurer.
- 1890—ST. PAUL, MINN.
J. H. CANFIELD, President.
W. R. GARRETT, Secretary.
E. C. HEWETT, Treasurer.
- 1891—TORONTO, ONT.
W. R. GARRETT, President.
E. H. COOK, Secretary.
J. M. GREENWOOD, Treasurer.
- 1892—SARATOGA SPRINGS, N. Y.
E. H. COOK, President.
R. W. STEVENSON, Secretary.
J. M. GREENWOOD, Treasurer.
- 1893—CHICAGO, ILL.
(International Congress of Education.)
ALBERT G. LANE, President.
IRWIN SHEPARD, Secretary.
J. M. GREENWOOD, Treasurer.
- 1894—ASBURY PARK, N. J.
ALBERT G. LANE, President.
IRWIN SHEPARD, Secretary.
J. M. GREENWOOD, Treasurer.
- 1895—DENVER, COLO.
NICHOLAS MURRAY BUTLER, President.
IRWIN SHEPARD, Secretary.
I. C. MCNEILL, Treasurer.
- 1896—BUFFALO, N. Y.
NEWTON C. DOUGHERTY, President.
IRWIN SHEPARD, Secretary.
I. C. MCNEILL, Treasurer.
- 1897—MILWAUKEE, WIS.
CHARLES R. SKINNER, President.
IRWIN SHEPARD, Secretary.
I. C. MCNEILL, Treasurer.
- 1898—WASHINGTON, D. C.
J. M. GREENWOOD, President.
IRWIN SHEPARD, Secretary.
I. C. MCNEILL, Treasurer.
- 1899—LOS ANGELES, CAL.
E. ORAM LYTE, President.
IRWIN SHEPARD, Secretary.
I. C. MCNEILL, Treasurer.
- 1900—CHARLESTON, S. C.
OSCAR T. CORSON, President.
IRWIN SHEPARD, Secretary.
CARROLL G. PEARSE, Treasurer.
- 1901—DETROIT, MICH.
JAMES M. GREEN, President.
IRWIN SHEPARD, Secretary.
L. C. GREENLEE, Treasurer.
- 1902—MINNEAPOLIS, MINN.
WILLIAM M. BEARDSHEAR, President.
IRWIN SHEPARD, Secretary.
CHARLES H. KEYES, Treasurer.
- 1903—BOSTON, MASS.
CHARLES W. ELIOT, President.
IRWIN SHEPARD, Secretary.
W. M. DAVIDSON, Treasurer.
- 1904—ST. LOUIS, MO.
JOHN W. COOK, President.
IRWIN SHEPARD, Secretary.
MCHENRY RHOADS, Treasurer.
- 1905—ASBURY PARK AND OCEAN GROVE, N. J.
WILLIAM H. MAXWELL, President.
IRWIN SHEPARD, Secretary.
JAMES W. CRABTREE, Treasurer.
- 1906—No session.
- 1907—LOS ANGELES, CAL.
NATHAN C. SCHAEFFER, President.
IRWIN SHEPARD, Secretary.
J. N. WILKINSON, Treasurer.

NAME CHANGED TO

NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

- 1908—CLEVELAND, OHIO
EDWIN G. COOLEY, President.
IRWIN SHEPARD, Secretary.
ARTHUR H. CHAMBERLAIN, Treasurer.
- 1909—DENVER, COLO.
LORENZO D. HARVEY, President.
IRWIN SHEPARD, Secretary.
ARTHUR H. CHAMBERLAIN, Treasurer.

NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

OFFICERS FOR 1908-9

GENERAL ASSOCIATION

LORENZO D. HARVEY	<i>President</i>	Menomonie, Wis.
IRWIN SHEPARD.....	<i>Secretary</i>	Winona, Minn.
ARTHUR H. CHAMBERLAIN.....	<i>Treasurer</i>	Pasadena, Cal.

VICE-PRESIDENTS

EDWIN G. COOLEY, President, D. C. Heath & Co.....	Boston, Mass.
JAMES C. BYRNES, Member of Board of Examiners, City Schools.....	New York, N. Y.
ARNOLDAS H. MCCLURE, Superintendent of Schools.....	Yuma, Ariz.
CARLETON B. GIBSON, Superintendent of Schools.....	Columbus, Ga.
JOSEPH ROSIER, Superintendent of Schools.....	Fairmont, W. Va.
JASPER L. MCBRIEN, State Superintendent of Public Instruction.....	Lincoln, Nebr.
GEORGE M. PHILIPS, Principal, State Normal School.....	West Chester, Pa.
BENJAMIN F. MOORE, Superintendent of Schools.....	Marion, Ind.
CHARLES EVANS, Superintendent of Schools.....	Ardmore, Okla.
JAMES A. EDWARDS, Editor, <i>Iowa Normal Monthly</i>	Dubuque, Iowa
GEORGE H. MARTIN, Secretary, State Board of Education.....	West Salem, Mass.
KATHERINE L. CRAIG, State Superintendent of Public Instruction.....	Denver, Colo.

BOARD OF TRUSTEES

JAMES M. GREENWOOD, <i>Secretary</i>	Kansas City, Mo.....	Term expires July, 1909
NICHOLAS MURRAY BUTLER, <i>Chairman</i>	New York, N. Y.....	Term expires July, 1910
HENRY B. BROWN.....	Valparaiso, Ind.....	Term expires July, 1911
CARROLL G. PEARSE.....	Milwaukee, Wis.....	Term expires July, 1912
LORENZO D. HARVEY.....	Menomonie, Wis.....	<i>Ex officio</i>

EXECUTIVE COMMITTEE

LORENZO D. HARVEY.....	<i>President</i>	Menomonie, Wis.
EDWIN G. COOLEY.....	<i>First Vice-President</i>	Boston, Mass.
ARTHUR H. CHAMBERLAIN.....	<i>Treasurer</i>	Pasadena, Cal.
NICHOLAS MURRAY BUTLER.....	<i>Chairman, Board of Trustees</i>	New York, N. Y.
JOHN H. PHILLIPS.....	<i>Member by Election</i>	Birmingham, Ala.
IRWIN SHEPARD.....	<i>Secretary</i>	Winona, Minn.

BOARD OF DIRECTORS

Directors ex officio

LORENZO D. HARVEY, Menomonie, Wis.	ARTHUR H. CHAMBERLAIN, Pasadena, Cal.
EDWIN G. COOLEY, Boston, Mass.	NICHOLAS MURRAY BUTLER, New York, N. Y.
IRWIN SHEPARD, Winona, Minn.	•

Life Directors

BICKNELL, THOMAS W., Providence, R. I.	GREEN, JAMES M., Trenton, N. J.
BOARD OF EDUCATION, Nashville, Tenn.	GREENWOOD, J. M., Kansas City, Mo.
BROWN, ELMER ELLSWORTH, Washington, D. C.	HARRIS, W. T., Washington, D. C.
BUTLER, NICHOLAS MURRAY, New York, N. Y.	JEWETT, A. V., Abilene, Kan.
*CANFIELD, JAMES H., New York, N. Y.	LYTE, ELIPHALET ORAM, Millersville, Pa.
COOK, JOHN W., DeKalb, Ill.	MARSHALL, T. MARCELLUS, Stouts Mills, W. Va.
COOLEY, EDWIN G., Boston, Mass.	MAXWELL, WILLIAM H., New York, N. Y.
CORSON, OSCAR T., Columbus, Ohio	PARKER, CHARLES L., Chicago, Ill.
ELIOT, CHARLES W., Cambridge, Mass.	PICKARD, JOSIAH L., Los Angeles, Cal.
GOVE, AARON, Denver, Colo.	PIKE, JOSHUA, Jerseyville, Ill.
GRAHAM, H. A., Mt. Pleasant, Mich.	SCHAEFFER, NATHAN C., Harrisburg, Pa.

* Deceased.

Life Directors—*continued*

SKINNER, CHARLES R., Watertown, N. Y.	TAYLOR, A. R., Decatur, Ill.
STATE TEACHERS' ASSOCIATION, Illinois	TEACHERS' INSTITUTE, Philadelphia, Pa.
STRATTON, C. C., St. Johns, Ore.	WHITE, CHARLES G., Lake Linden, Mich.
WILSON, J. ORMOND, Washington, D. C.	

Directors by Election

Alabama.....	JOHN W. ABERCROMBIE, President, University of Alabama, University P. O.
Arizona.....	A. J. MATTHEWS, President, Territorial Normal School, Tempe
Arkansas.....	GEORGE B. COOK, State Superintendent of Public Instruction, Little Rock
California.....	DUNCAN MACKINNON, Superintendent of Schools, San Diego
Colorado.....	CHARLES E. CHADSEY, Superintendent of Schools, Denver
Connecticut.....	CHARLES H. KEYES, Superintendent of Schools, South District, Hartford
Delaware.....	GEORGE W. TWITMYER, Superintendent of Schools, Wilmington
District of Columbia.....	W. T. HARRIS, Ex-United States Commissioner of Education, Washington
Florida.....	MISS CLEM HAMPTON, Department of Education, Tallahassee
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TREASURER'S REPORT

OF THE

NATIONAL EDUCATION ASSOCIATION

JULY 1, 1908, TO JUNE 30, 1909

Arthur H. Chamberlain, in Account with the National
Education Association

BALANCE ON HAND JULY 1, 1908

Balance brought forward from Treasurer's report for year ending June 30, 1908.....	\$2,357.60
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RECEIPTS

From Annual Meeting:		
Advance Enrollment—		
From H. G. Williams.....	\$ 694.00	
From W. G. Rose.....	4,834.00	
Convention Registration.....		\$5,528.00
		10,630.85
From Memberships, Chicago Meeting of Department of Superintendence		\$16,158.85
From Secretary's office during the year:		\$ 1,446.00
Membership fees.....	\$8,868.00	
Enrollment fees.....	594.00	
Exchange.....	9.61	
Sale of back volumes.....	839.08	
Sale of Committee Reports, etc.....	163.04	
Miscellaneous.....	6.77	
		\$10,480.50
From interest on Permanent Fund.....		6,743.17
From royalty on sale of Reports on Committees of Ten and Fifteen		53.25
From interest on deposits in First National Bank of Chicago.....		179.30
		\$35,061.07

DISBURSEMENTS

Board of Trustees:		
For expenses.....	\$18.64	\$18.64
Executive Committee expenses:		
President.....	\$203.42	
First Vice-President.....	14.85	
Treasurer.....	394.83	
Chairman, Board of Trustees.....	177.34	
Member by election.....	150.88	
		\$941.32
General Secretary's office:		
Salary of Secretary.....	\$4,000.00	
Postage.....	2,238.33	
Telegrams.....	190.81	
Freight and express	54.83	
Clerical services	2,878.68	
Exchange.....	.90	
Stationery and office supplies.....	188.74	
Traveling.....	317.40	
Rent.....	600.00	
Miscellaneous.....	65.65	
		\$10,544.34

Printing:

Volumes of <i>Proceedings</i> (10,500 copies).....	\$8,182.30	
Yearbooks (6,250 copies).....	<u>1,050.55</u>	\$9,232.85
Reprints from volumes		921.99
Special reports		464.79
Executive Committee Bulletins.....		1,973.10
Miscellaneous (letterheads, blanks, envelopes, etc.)		<u>854.95</u>
		\$13,447.68

Express and Freight:

Distribution of volumes and reports.....	\$3,524.56	
Miscellaneous.....	<u>208.27</u>	\$3,732.83

Special Appropriations:

Committee of Shortage of Teachers.....	\$246.80	
Committee on Place of Industries.....	72.50	
Committee on Moral Education.....	5.75	
Committee on Exceptional Children.....	6.50	
Committee on Industrial Education.....	<u>12.00</u>	\$343.55

Conventions:

Department of Superintendence:

Clerical service—

Registration and typewriting 103.17

Badges..... 76.00

Printing—

Programs for the Convention..... 51.00

Miscellaneous—

Bill of Yawman & Erbe Mfg. Co..... \$9.00

Bill of A. H. Andrews & Co..... 6.00 15.00

\$245.17

Annual Convention:

Department expenses..... \$261.36

State directors and managers..... 469.12

Clerical services:

Registration Bureau..... 706.56

Stenographers and typewriter operators..... 540.92

\$1,977.96

Printing:

Programs..... \$529.00

Miscellaneous..... 35.60

\$564.60

Express and freight.....

\$ 3.25

Stationery..... 52.72

Telegrams..... 85.05

Miscellaneous:

Expense of Speaker (Cleveland Meeting)..... \$406.75

Other miscellaneous expenses..... 44.55 451.30

\$592.32

Unclassified disbursements:

Bonds of Secretary and Treasurer..... \$50.00

Auditing books of Secretary and Treasurer..... 30.00

Exchange of typewriter..... 30.00

Conference of Department Presidents..... 769.54

Expense incurred in securing 75 R. R. Certificates, Department of

Superintendence..... 185.10

Miscellaneous:

Purchase of reports..... \$ 4.50

Press clippings 30.00

Office furniture, etc..... 37.00

Refunds of duplicate payments..... 60.12

Reports of Committees of Ten and Fifteen..... 5.00 136.62

\$1,201.26

\$33,609.67

SUMMARY

Receipts

Balance brought forward from the Treasurer's report for year ending June 30, 1908	\$ 2,357.60	
Receipts for year July 1, 1908, to June 30, 1909	35,061.07	
	<u> </u>	\$37,418.67

Disbursements

Total expenses for the year.....		\$33,600.67
Balance in treasury, June 30, 1909		<u>\$ 3,809.00</u>

TWENTY-THIRD ANNUAL REPORT OF THE BOARD OF TRUSTEES OF THE NATIONAL EDUCATION ASSOCIATION

FOR THE YEAR JULY 1, 1908, TO JUNE 30, 1909

DENVER, COLORADO, July 1, 1909

To the Board of Directors of the National Education Association:

The Board of Trustees of the National Education Association has the honor to submit its report on the Permanent Fund of the Association for the year ending June 30, 1909.

The amounts collected as income from the Permanent Fund and the disposition made of the income are shown in the following Income Account.

The changes in the investments held for the Permanent Fund are shown in the following Principal Account.

There have been no additions to the principal of the fund during the year by transfer from the current funds of the Association other than the amount of \$72—being the accrued interest (\$49.50) on \$9,000 New York City bonds, purchased June 12, 1908, and the fee of the First Trust and Savings Bank of Chicago on this investment (\$22.50)—erroneously charged to Principal Account in the report of 1908.

The present state of the investments held for the Permanent Fund is shown in the following Statement of Securities held for the Permanent Fund.

During the year three Chicago real estate mortgages and one Lemont, Illinois, school bond have been paid off and the proceeds invested, as shown, in \$10,000 3½ per cent. convertible bonds of the Pennsylvania Railroad Company, and \$10,000 fifty-year 4 per cent. bonds of the Chicago, Indiana and Southern Railway Company, guaranteed both as to principal and interest by the Lake Shore and Michigan Southern Railway Company.

The Permanent Fund amounts, at this date, to \$170,100.

Statement A shows the net income of the property at 4762 Lake Avenue, Chicago, Illinois, title to which, as previously reported, was taken by the Trustees under proceedings for foreclosure of mortgage. Every effort is making to dispose of this property.

The operations of the year, and the present state of the Permanent Fund, are set out in detail in the accounts and statements which follow:

INCOME ACCOUNT

RECEIPTS

\$ 7,000	St. Louis and San Francisco R. R. Co. refunding bonds, 1951, at 4 per cent.	\$ 280.00
15,000	Terminal Association of St. Louis general refunding bonds, 1953, at 4 per cent.	600.00
20,000	Pittsburg, Lake Erie and West Virginia System refunding bonds, 1941, at 4 per cent.	800.00
10,000	Oregon Short Line R. R. Co. refunding bonds, 1929, at 4 per cent.	400.00
17,000	City of New York registered bonds, 1957, at 4½ per cent.	765.00
2,500	Village of Morgan Park gold bonds, 1911, at 4½ per cent.	157.50
1,000	Village of Morgan Park gold bonds, 1912, at 4½ per cent.	
1,500	Lemont, Ill., school bonds, at 5 per cent.	75.00
10,000	Chicago drainage bonds, 1916	2,000.00
40,000	Chicago drainage bonds, 1917	
9,000	West Chicago park bonds, 1918	760.00
10,000	West Chicago park bonds, 1919	
10,000	Pennsylvania R. R. Co. convertible bonds, 1915, at 3½ per cent. (6 months)	175.00
2,500	Bond and mortgage on 5603 Madison Ave., Chicago (Lewis), 1909, at 5 per cent.	125.00
	Interest to date of partial payment of bond and mortgage on 5603 Madison Ave., Chicago (Lewis), \$2,500 at 5 per cent.	62.50

Interest to date of payment on bond and mortgage on 5136 Hibbard Ave., Chicago (Ritchie) \$5,000 at 5 per cent.	141.91
Interest to date of payment on bond and mortgage on 5239 Cornell Ave., Chicago (Dickinson), \$11,000 at 4½ per cent.	495.00
Interest to date of payment of principal on Lemont, Illinois, school bond, \$500 at 5 per cent.	12.50
Interest on cash balance in First Trust and Savings Bank, Chicago.	102.17
Net income of property 4762 Lake Ave., Chicago (see Statement A).....	186.28
	<u>\$7,137.86</u>

DISBURSEMENTS

Transferred to principal account.....	\$ 72.00
Accrued interest on \$10,000 Pennsylvania R. R. Co. bonds.	38.89
Accrued interest on \$10,000 Chicago, Indiana and Southern Railway Co. bonds.....	16.67
Fee of First Trust and Savings Bank, Chicago, Illinois, on new investment of \$20,000—½ of 1 per cent.	50.00
Fee of First Trust and Savings bank, Chicago, Illinois, for care of principal of permanent fund.....	217.13
Net income paid to the Treasurer of the National Education Association...	<u>6,743.17</u>
	<u>\$7,137.86</u>

PRINCIPAL ACCOUNT

RECEIPTS

Cash on hand for investment July 1, 1908.....	\$ 925.50
Mortgage 5603 Madison Ave. (Lewis), partial payment made July 1, 1908 ..	2,500.00
Mortgage 5136 Hibbard Ave. (Ritchie), paid November 4, 1908	5,000.00
Mortgage 5239 Cornell Ave. (Dickinson), paid January 2, 1909.....	11,000.00
Lemont, Illinois, school bond, paid December 1, 1908.....	500.00
Transferred from Income Account.....	72.00
	<u>\$19,997.50</u>

DISBURSEMENTS

\$10,000	Pennsylvania R. R. Co. 3½ per cent. convertible bonds, due October 1, 1915, Nos. B-22823 to B-22838 inclusive, B-27655, B-27671, B-27672, and B-11258 at 95.....	\$9,500.00
10,000	Chicago, Indiana and Southern Railway Co. 50-year 4 per cent. gold bonds, due January 1, 1956, Nos. 11386 to 11394 and 13786, at 95.....	9,500.00
	Cash on hand for investment June 30, 1909.....	997.50
		<u>\$19,997.50</u>

STATEMENT OF SECURITIES HELD FOR THE PERMANENT FUND
JUNE 30, 1909

MUNICIPAL AND SCHOOL BONDS

Par Value	Security	Acquired	Interest	Book Value
\$ 8,000	City of New York registered gold bonds, due November 1, 1957.....	Feb. 29, 1908	4½% May and Nov.	\$8,510.00
9,000	City of New York gold bonds, due November 1, 1957.....	June 12, 1908	4½% May and Nov.	9,810.00
2,500	Village of Morgan Park, Ill., gold bonds, due November 1, 1911.....	1895	4½% May and Nov.	2,500.00
1,000	Village of Morgan Park, Ill., gold bonds, due July 1, 1913.....		4½% Jan. and July	1,000.00
1,500	Lemont, Ill., school bonds, Nos. 24, 30, and 32, payable \$500 December 1, yearly.....	1897	5% June and Dec.	1,500.00
10,000	Sanitary District of Chicago, drainage bonds, Nos. 24,516-24,525, due December 1, 1916.....	1905	4% June and Dec.	10,000.00
40,000	Sanitary District of Chicago, drainage bonds, Nos. 24,591-24,625, 24,636-24,640, due December 1, 1917.....	1904	4% June and Dec.	40,000.00
9,000	West Chicago park bonds, Nos. 1,101-1,109, due April 1, 1918.....	July 31, 1906	4% April and Oct.	9,045.00
10,000	West Chicago park bonds, Nos. 615,629-631, 1,243-1,248, due April 1, 1909....	July 31, 1906	4% April and Oct.	10,075.00
\$91,000				<u>\$92,440.00</u>

RAILROAD BONDS

Par Value	Security	Acquired	Interest	Book Value
\$ 7,000	St. Louis and San Francisco R. R. Co. refunding gold bonds, Nos. 47,435, 47,457, 47,537, 49,012, 49,670, 57,373, 57,514, due July 1, 1951.....	Jan. 3, 1907	4% Jan. and July	\$ 5,775.00
15,000	Terminal Association of St. Louis general refunding sinking fund gold bonds, Nos. 16,311-16,325, due January 1, 1953.....	Jan. 30, 1905	4% Jan. and July	15,050.00
20,000	Pittsburg, Lake Erie, and West Virginia System refunding gold bonds, Nos. 13,496-13,500, 21,236-21,250, due November 1, 1941.....	Jan. 13, 1906	4% May and Nov.	19,942.50
10,000	Oregon Short Line R. R. Co. guaranteed refunding gold bonds, Nos. 4,013-4,017, 4,025-4,027, 4,976, 13,810, due December 1, 1929.....	Feb. 3, 1908	4% June and Dec.	8,895.00
10,000	Pennsylvania R. R. Co. convertible bonds, Nos. B-22,823 to B-22,838, inclusive, B-27,655, B-27,671, B-27,672, and B-11,258, due October 1, 1915....	Jan. 11, 1909	4% June and Dec.	9,500.00
10,000	Chicago, Indiana and Southern Railway Co. bonds, Nos. 11,386 to 11,394 inclusive, and 13,786, due January 1, 1956..	Jan. 18, 1909	4% Jan. and July	9,500.00
\$72,000				\$68,662.50

REAL ESTATE MORTGAGES

Par Value	Security	Acquired	Interest	Book Value
\$2,500	Bond and mortgage on 5603 Madison Ave., Chicago, Ill. (Lewis), due July 1, 1909.....	1900	5% Jan. and July	\$2,500.00

REAL ESTATE

Par Value	Security	Acquired	Interest	Book Value
\$5,500	4762 Lake Ave., Chicago, Ill. (Hord property).....	1907	Rent \$30 monthly	\$5,500.00

	Cash on hand awaiting investment.....	\$007.50
Total	Total.....	\$170,100.00
\$171,000		

STATEMENT A

PROPERTY AT 4762 LAKE AVENUE, CHICAGO, ILLINOIS (HORD PROPERTY)

RECEIPTS

Rents received by First Trust and Savings Bank, Chicago, Illinois.....	\$360.00
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DISBURSEMENTS

Taxes and special assessments.....	\$102.37
Repairs.....	13.35
Allowance to tenant.....	40.00
Fees of 5 per cent. of First Trust and Savings Bank on \$360.00 rents collected.....	18.00
Net income.....	186.28
	\$360.00

Respectfully submitted

NICHOLAS MURRAY BUTLER
 JAMES M. GREENWOOD
 HENRY B. BROWN
 CARROLL G. PEARSE
 LORENZO D. HARVEY

Trustees

To the Trustees of the National Education Association:

GENTLEMEN: The above and foregoing is a correct statement of the account of the funds of the National Education Association of the United States from July 1, 1908, to July 1, 1909, as the same appears on the books of this bank.

First Trust and Savings Bank.

By LOUIS BOISOT, *Trust Officer*

DEKALB, ILL., June 5, 1909

To the Board of Directors of the N. E. A.:

I have this day examined the securities in the foregoing statement made by the Board of Trustees, and find all bonds and securities therein named in the custody of Louis Boisot, Trust Officer of the First Trust and Savings Bank, of Chicago, Ill.

(Signed) JOHN W. COOK, *Examiner*

JOURNAL OF PROCEEDINGS
OF THE
FORTY-SEVENTH ANNUAL CONVENTION
OF THE
NATIONAL EDUCATION ASSOCIATION OF
THE UNITED STATES
DENVER, COLORADO, JULY 3-9, 1909

EDUCATIONAL SUNDAY

In accordance with an established custom of the Association, Sunday, July 4, was observed as Educational Sunday by a large number of the churches of Denver and of the state of Colorado. The pastors of churches in Denver held special services, with sermons or addresses on educational topics as follows—all services were in the morning unless otherwise noted:

- "The College of the Future" (morning); "The March of Peace" (evening)—Rev. James D. Rankin, First United Presbyterian Church.
- "The School House and the Nation"—Rev. J. F. Harris, Asbury Methodist Episcopal Church.
- "Modern Education Better Than Old-fashioned Regeneration" (morning); "The Religious Spirit in Science, and the Scientific Spirit in Religion" (evening)—Rev. Henry W. Pinkham, Bethany Baptist Church.
- "The Church Part in Education" (evening)—Rev. Charles H. Pettibone, Boulevard Congregational Church.
- "Education and the Nation"—Rev. Frost Craft, Capitol Hill Methodist Episcopal Church.
- "Our Progressive School System. Is the Church Shirking?"—Rev. G. A. Schmidt, German Evangelical Church.
- "America's Educational Opportunities"—Rev. Jesse Albert Dean, Wright Memorial Methodist Episcopal Church.
- "The Mission of the School"—Rev. C. N. Swihart, Trinity English Lutheran Church.
- "Christ as an Inspirer of the Human Intellect"—Rev. Louis Albert Banks, Trinity Methodist Episcopal Church.
- "The Education of the Heart"—Rev. R. B. Peery, St. Paul's English Lutheran Church.
- "The Religious Factor in Education"—Rev. Frederick F. Kramer, All Saints' Protestant Episcopal Church.
- "The Kingliest Teacher"—Rev. G. R. Edmundson, York St. Presbyterian Church.
- "The American Public School Our One Democratic Institution—An Appreciation and a Plea"—Rev. W. H. Hopkins, Third Congregational Church.
- "The Fundamental Elements of True Education"—Rev. Chas. F. Seitter, Cameron Memorial Methodist Episcopal Church.
- "Education—The Privileges and Responsibilities"—Rev. A. J. Finch, Calvary Baptist Church.
- "Christian Education"—Rev. C. J. Rose, Harkness Heights Methodist Episcopal Church.
- "Teacher and Taught"—Rev. S. E. Taylor, Berkeley Presbyterian Church.
- "The Failure of the Public-School System to Produce a Robust National Character and the Remedy"—Rev. H. Martyn Hart, St. John's Chapter House.

- "Intelligent Patriotism"—Rev. Guy E. Konkel, Merritt Memorial Methodist Episcopal Church.
- "America's Triple Crown: Personal Liberty, Public Education, and the Religion of Jesus Christ"—Rev. T. C. Smith, First Avenue Presbyterian Church.
- "True Education"—Rev. Ira D. Hall, Baptist Church (Golden, Colo.).
- "Some Victories of Peace"—Rev. E. E. Weller, State Industrial School for Boys (Golden, Colo.).
- "The Meaning of True Education"—Rev. Jesse B. Haston, East Side Christian Church.
- "Life's Teachers"—Rev. Chas. G. Williams, Hyde Park Presbyterian Church.
- "What is Educational"—Rev. C. E. Wakefield, Hess Methodist Episcopal Church.
- "Christianity and Education"—Rev. P. F. Ramsey, St. Paul's Methodist Episcopal Church, South.
- "Education and Patriotism"—Rev. W. B. Craig, Central Christian Church.
- "To School with the Great Teacher"—Rev. N. O. Bartholomew, Ohio Avenue Congregational Church.
- "Character Building"—Rev. Frederick Carman, St. Peter's Episcopal Church.
- "Education in Its Relation to Action"—Rev. O. S. Baum, Highland Park Church.
- "The Church and Education"—Rev. Henry F. Cope, General Secretary, Religious Educational Association, First Baptist Church.
- "True Education"—Rev. J. E. Pickett, Highland Christian Church.
- "Education and the Common Weal"—Rev. M. D. Hornbeck, Grant Avenue Methodist Episcopal Church.
- "The Church in Its Relation to Modern Educational Ideals"—Rev. Wm. Theodore Paullin, Capitol Hill Baptist Church.
- "The End and the Aim of Education and the Development of the Whole Character"—Rev. C. H. Marshall, St. Barnabas Church.
- "Our Divine Image"—Rev. David H. Fouse, The First Reformed Church.
- "Moral Factors in Education"—Arthur H. Chamberlain, Dean of Throop Polytechnic Institute, Pasadena, Cal., First Universalist Church.
- "Education in Patriotism, with a Tribute to Edward Everett Hale"—Rev. David Utter, Unity Church.

OPENING SESSION.—MONDAY EVENING, July 5

The forty-seventh annual convention of the National Education Association was called to order by President Lorenzo D. Harvey of Menomonie, Wis., in the Auditorium, at 8 o'clock p. m.

Invocation by Rev. William O'Ryan, St. Leo's Church, Denver.

The audience, under the direction of Wilberforce J. Whiteman, supervisor of music, Denver, sang the hymn "America."

Hon. John F. Shafroth, governor of Colorado, delivered an address of welcome on behalf of the state of Colorado and the city of Denver.

Edgar H. Mark, superintendent of schools, Louisville, Ky., responded to the address of welcome on behalf of the members of the Association.

Lorenzo D. Harvey, president of Stout Institute, Menomonie, Wis., and president of the Association, then delivered the annual presidential address on the subject "The Need, Scope, and Character of Industrial Education in the Public-School System."

A baritone solo, "Toreador Song" from "Carmen"—*Bizet*—was sung by Robert Henry Perkins.

Miss Laura Drake Gill, president of the Association of Collegiate Alumnae, Washington, D. C., delivered an address upon "The Service of Organized Women to the Public Schools."

President Harvey then announced the following

COMMITTEE ON RESOLUTIONS

Edwin G. Cooley, of Massachusetts, *Chairman* Augustus S. Downing, of New York.
 Charles H. Keyes, of Connecticut. Silvanus L. Heeter, of Minnesota.
 William A. Greeson, of Michigan. Robert A. Armstrong, of West Virginia.
 John H. Phillips, of Alabama.

SECOND SESSION.—TUESDAY EVENING, July 6

The second session of the Association was called to order by President Harvey at 8 o'clock P. M.

Music: "Onward March"—*Geibel*—Knickerbocker Male Quartette.

Nicholas Murray Butler, president of Columbia University, New York City, delivered an address on "The Call to Citizenship."

"Ethics in Civic Life" was the subject of an address by John W. Abercrombie, president of the University of Alabama, Tuscaloosa, Ala.

Music: "Go where Glory Waits Thee"—*Terhak*—Knickerbocker Male Quartette.

Wilbur F. Gordy, superintendent of schools, Springfield, Mass., delivered an address upon "Education and the World's Petition to the Third Hague Conference."

THIRD SESSION.—WEDNESDAY AFTERNOON, July 7

The opening address of the session was delivered by James W. Robertson, president of Macdonald College, Ste. Anne de Bellevue, Quebec, Canada, on the subject "Education for the Improvement of Rural Conditions."

Edwin G. Dexter, commissioner of education, Porto Rico, delivered an address upon "The Educational Problem in Porto Rico."

Nicholas Murray Butler, president of Columbia University, New York City, spoke briefly in memory of Dr. James Hulme Canfield, secretary of the Association for the years 1887, 1888, and 1889, and president of the Association for the year 1890.

The following Committee on Nominations was announced by President Harvey in accordance with sections 3 and 4, article 2, of the By-Laws:

COMMITTEE ON NOMINATIONS

Z. X. SNYDER, of Colorado, *Chairman*

Alabama.....	JOHN W. ABERCROMBIE.....	University
Arizona.....	MERNA B. ROBINSON.....	Morenci
Arkansas.....	W. B. TORREYSON.....	Little Rock
California.....	C. C. VAN LIEW.....	Chico
Colorado.....	Z. X. SNYDER.....	Greeley
Connecticut.....	CHARLES H. KEYES.....	Hartford
Delaware.....	(Vacant).....	
District of Columbia.....	DICK J. CROSBY.....	Washington
Florida.....	MISS CLEM HAMPTON.....	Tallahassee
Georgia.....	(Vacant).....	
Idaho.....	WALTER R. SIDERS.....	Pocatello
Illinois.....	S. E. HARWOOD.....	Carbondale
Indiana.....	ROBERT J. ALEY.....	Indianapolis
Iowa.....	O. P. BOSTWICK.....	Clinton
Kansas.....	E. T. FAIRCHILD.....	Ellsworth
Kentucky.....	C. W. RICHARDS.....	Princeton
Louisiana.....	MISS MARION BROWN.....	New Orleans
Maine.....	(Vacant).....	
Maryland.....	JAMES H. VAN SICKLE.....	Baltimore
Massachusetts.....	J. E. BURKE.....	Boston
Michigan.....	DAVID MACKENZIE.....	Detroit
Minnesota.....	E. G. SCHULZ.....	St. Paul
Mississippi.....	F. B. WOODLEY.....	Hattiesburg
Missouri.....	JOHN R. KIRK.....	Kirksville
Montana.....	C. A. DUNIWAY.....	Missoula
Nebraska.....	E. J. BODWELL.....	Beatrice

Nevada.....	(Vacant)	
New Hampshire.....	(Vacant).....	
New Jersey.....	J. M. GREEN.....	Trenton
New Mexico.....	W. E. GARRISON.....	Agr'l College
New York.....	NICHOLAS MURRAY BUTLER.....	New York City
North Carolina.....	W. H. SWIFT.....	Greensboro
North Dakota.....	S. HENRY WOLFE.....	Minot
Ohio.....	WILLIAM MCK. VANCE.....	Delaware
Oklahoma.....	E. D. CAMERON.....	Guthrie
Oregon.....	W. J. KERR.....	Corvallis
Pennsylvania.....	J. GEORGE BECHT.....	Clarion
Rhode Island.....	JOHN L. ALGER.....	Providence
South Carolina.....	D. B. JOHNSON.....	Rock Hill
South Dakota.....	H. A. USTRUD.....	Pierre
Tennessee.....	G. A. LOFTON.....	Nashville
Texas.....	R. B. COUSINS.....	Austin
Utah.....	D. H. CHRISTENSEN.....	Salt Lake City
Vermont.....	(Vacant).....	
Virginia.....	ANNA L. KINDERDINE.....	Radford
Washington.....	E. T. MATHES.....	Bellingham
West Virginia.....	THOMAS C. MILLER.....	Fairmont
Wisconsin.....	C. P. CARY.....	Madison
Wyoming.....	C. O. MERICA.....	Cheyenne

FOURTH SESSION.—THURSDAY EVENING, July 8

Music: Contralto Duet—"The Morn of Endless Light"—*Nevin*—Mrs. W. J. Whiteman, Mrs. Ferne Whiteman Smith.

Ben B. Lindsey, judge of the Juvenile Court, Denver, presented the opening address of the session on the subject "The Child and the State."

An address on the topic "Hygiene in the Boston Public Schools" was delivered by J. E. Burke, assistant superintendent of schools, Boston, Mass.

Ben Blewett, superintendent of instruction, Public Schools, St. Louis, Mo., delivered an address on "The Department of Hygiene in the St. Louis Public Schools."

FIFTH SESSION.—FRIDAY EVENING, July 9

Music: Longmont School Band, directed by S. R. Schraeder.

The closing session of the convention was called to order by President Harvey at 8 o'clock P. M.

The opening address was by Henry Baird Favill, M.D., Chicago, Ill., on the subject "Should the Public School Be the Bulwark of Public Health?"

Clifford W. Barnes, honorary secretary, International Committee on Moral Training, Chicago, Ill., delivered an address on the subject "Moral Training thru the Agency of the Public Schools."

The closing address of the convention was delivered by Frank C. Sharp, professor of philosophy, University of Wisconsin, Madison, Wis., on the subject "An Experiment in Moral Education."

The following letter was sent to be read before general sessions during the convention. It was received too late. It is printed in the *Proceedings* on account of its historical importance.—[THE SECRETARY.]

ON THE MAINE COAST, July 3, 1909

To the National Education Association of the United States:

Cordial greetings from the East! I am mindful of the fact that the great meetings you are now holding in Denver mark the twenty-fifth anniversary of a remarkable series since the first memorable gathering at Madison, Wis., in 1884. Concerning that meeting, I have a large amount of valuable correspondence and other material of historic value, which I will contribute to the Association whenever it shall have proper conditions for their preservation.

Many of the strong men and women of the Association, who helped to make the Madison meeting of 1884 famous, have passed on from noble service to rich rewards.

A quarter of a century of great doings has dulled the memories of survivors, while others are engrossed in the interesting problems of today, unconscious of the events which have made the present conditions possible.

Let me congratulate the Association on the great work it has accomplished in these recent years. Shall I be pardoned, however, if I call attention to some of the great results flowing directly from the meeting of 1884?

The Madison meeting was the first national meeting the Association ever held. Prior to that date, the Association was provincial in its character and work. It was an eastern institution, mainly in the hands of New England, Ohio, and Illinois men. It was small in membership, poor in purse, conservative in policy. It had a small clientèle, a very limited influence, and in no practical way touched and molded educational opinion and practice.

The meeting at Saratoga in 1883 had an attendance of less than three hundred persons, with no enthusiasm, little optimism, and no broad outlook. At its adjournment, a debt in dollars twice the size of the membership lay at the doors of the treasury.

In 1884, it was estimated that more than seven thousand people gathered at Madison from all parts of the Union, as well as from other lands. The Central West and North West awoke to its opportunity, and sent thousands of its most active educators to this educational revival. The East sent a splendid delegation. The South was well represented by its white and colored teachers. It was a real national gathering of men and women representing all grades of work, from kindergarten to university. Distinguished teachers from all parts of the land were on the program, which was truly national in scope and ability. Booker T. Washington was introduced in his maiden speech to the American public. An educational exposition superior, according to United States Commissioner Harris, to that of the Centennial at Philadelphia, was held in the State House at Madison. Enthusiasm was universal. All felt that a new day had come to American educators, and that a national life had been infused into the veins of the Association. Another great gain was the discovery of the West, not only to itself but to the rest of the country. Like a sleeping giant, the West had not been conscious of its place and power in the great Confederacy of Education. From this event dates the most remarkable exhibition of intellectual energy and progress the world has witnessed in the Central and Western States.

The Madison meeting illustrated the value of numbers as a social educational force. It also made known the value of organization in the accomplishment of large ventures in matters ethical, moral, and spiritual, as well as in business and finance. It made possible the analysis and differentiation of forces, materials, and equipment on broad, national grounds.

Space forbids more than the bare mention of the foundation of a fund, the organization of departments, the enlistment of state organizers and managers, the appointment of a permanent Secretary of the Association, and the multitude of secondary results flowing from the Madison meeting of 1884.

"Other men labored, and ye have entered into their labors."

THOMAS W. BICKNELL,

President of the National Educational Association for the Year 1884.

President Harvey, in closing the session, spoke as follows:

In closing this, our last session, I wish to express my thanks to all those who have assisted me in preparing for these meetings—especially to the officers of this Association and to the heads of departments. I wish to express on behalf of the officers of the Association, and I feel sure that I am voicing the sentiment of the great body of the Association, when I say to your Local Executive Committee of Denver and to the citizens of Denver, that we feel that we have been royally entertained. We came back here a second time to this city with the memories of our visit of fourteen years ago, and we shall go from it with memories that will linger longer than fourteen years and that will bring us back again and again.

I think a special word is due to Dr. Charles E. Chadsey, chairman of the Local Executive Committee, for his thoughtfulness, his kindness, his courtesy, and his efficiency in carrying out the plans for this meeting.

I think a word is due from the officers of this Association and its members to those persons who have appeared upon our programs, some of whom are not engaged in educational work, but who have graciously taken the time to prepare addresses and to come here to give us their messages. To Dr. Robertson, Dr. Favill, and Mr. Barnes I wish to make acknowledgment of the appreciation of the officers of this Association.

I cannot close without expressing a personal tribute to one whom perhaps many of you have not seen during this convention, but one whose unflinching courtesy, untiring energy, and whose wisdom born of long service has been perhaps the most potent factor in what-

ever of success has attended this Association. I refer to that officer of the Association who has served it so long and well—Secretary Irwin Shepard. The president comes and serves but a single year, and but for this officer his lot would be a hard one indeed.

And now I have the honor of presenting to you the president-elect, Hon. James Y. Joyner, State Superintendent of North Carolina for three terms, whose work I know. When I say to you that he will bring to his duties as President of this Association the same earnestness and the same efficiency that he has shown in his work as state superintendent of North Carolina, I can pay him no greater tribute. I take pleasure in presenting to you President Joyner.

PRESIDENT JOYNER: Ladies and Gentlemen: I feel fortunate in receiving the gavel of authority from my distinguished friend who has wielded it so acceptably. To all of my friends I wish to express my heartfelt thanks for this high honor that you have conferred, for this national recognition of the struggle that my people yonder in the oldest part of this, our noble country, are making for the education of all their people. The honor is increased by your selection of me over such worthy competitors, but the joy is weakened by the fact that I cannot share this office and its honors with them. I wish to assure you that I shall bring to the discharge of my duties such ability as I have. I take them up with a sincere desire to serve well the great cause for which our Association stands in this great Republic of ours.

MINUTES OF MEETING OF THE ACTIVE MEMBERS OF THE ASSOCIATION

DENVER, COLO.—THURSDAY, JULY 8, 1909

The meeting was called to order at Trinity Methodist Church at 12 M. by President L. D. Harvey.

On motion, the minutes of the last annual meeting of the active members were approved as printed in the volume of *Proceedings*.

The report of the Board of Trustees, having been printed and placed in the hands of the members, was, on motion, accepted and adopted by vote of the members, and ordered printed in the annual volume of *Proceedings*.

The report of the Treasurer, as printed and distributed, was adopted and ordered printed in the annual volume of *Proceedings*.

Z. X. Snyder, of Colorado, chairman of the Committee on Nominations, presented the report of that committee, as follows:

To the Active Members of the National Education Association:

Your Committee on Nominations, thru its President, has the honor to report the following nominations:

For <i>President</i>	JAMES Y. JOYNER.....	North Carolina
For <i>Treasurer</i>	ARTHUR H. CHAMBERLAIN.....	California
For <i>Vice-Presidents</i>	LORENZO D. HARVEY.....	Menomonie, Wis.
	G. W. A. LUCKEY.....	Lincoln, Nebr.
	WILLIAM M. HOLLOWAY.....	Tallahassee, Fla.
	M. BATES STEPHENS.....	Annapolis, Md.
	FRANK B. DYER.....	Cincinnati, Ohio
	THOMAS H. HARRIS.....	Baton Rouge, La.
	WILLIAM J. KERR.....	Corvallis, Oregon
	MRS. KATHERINE COOK.....	Denver, Colo.
	HERVEY B. WORK.....	Wheeling, W. Va.
	WILLIAM A. MILLIS.....	Hanover, Ind.
	LLOYD E. WOLFE.....	San Antonio, Texas

And for directors for the States and Territories the following:

STATE DIRECTORS

Alabama.....	SAMUEL S. MURPHY.....	Mobile
Arizona.....	A. J. MATHEWS.....	Tempe
Arkansas.....	GEORGE B. COOK.....	Little Rock
California.....	DUNCAN MACKINNON.....	San Diego
Colorado.....	CHARLES E. CHADSEY.....	Denver
Connecticut.....	CHARLES H. KEYES.....	Hartford
Delaware.....	GEORGE W. TWITMYER.....	Wilmington
District of Columbia.....	ELMER ELLSWORTH BROWN.....	Washington
Florida.....	MISS CLEM HAMPTON.....	Tallahassee
Georgia.....	CARLETON B. GIBSON.....	Columbus
Idaho.....	MISS S. BELLE CHAMBERLAIN.....	Boise
Illinois.....	J. STANLEY BROWN.....	Joliet
Indiana.....	T. A. MOTT.....	Richmond
Iowa.....	FRANK L. SMART.....	Davenport
Kansas.....	JOHN MACDONALD.....	Topeka
Kentucky.....	W. H. BARTHOLOMEW.....	Louisville
Louisiana.....	WARREN EASTON.....	New Orleans
Maine.....	PAYSON SMITH.....	Augusta
Maryland.....	A. C. WILLISON.....	Cumberland
Massachusetts.....	IRVING O. PALMER.....	Newton
Michigan.....	E. E. SCRIBNER.....	Ishpeming

Minnesota.....	S. L. HEETER.....	St. Paul
Mississippi.....	E. E. BASS.....	Greenville
Missouri.....	HOWARD A. GASS.....	Jefferson City
Montana.....	W. E. HARMON.....	Helena
Nebraska.....	A. H. WATERHOUSE.....	Fremont
Nevada.....	ROMANZO ADAMS.....	Reno
New Hampshire.....	H. C. MORRISON.....	Concord
New Jersey.....	M. H. KINSLEY.....	Hoboken
New Mexico.....	J. E. CLARK.....	Santa Fé
New York.....	A. S. DOWNING.....	Albany
North Carolina.....	W. S. SNIPES.....	Winston-Salem
North Dakota.....	THOMAS HILLYER.....	Mayville
Ohio.....	J. W. MACKINNON.....	Bellefontaine
Oklahoma.....	LYNN GLOVER.....	Weatherford
Oregon.....	E. D. RESSLER.....	Corvallis
Pennsylvania.....	REED B. TEITRICK.....	Harrisburg
Rhode Island.....	H. W. LULL.....	Newport
South Carolina.....	D. B. JOHNSON.....	Rock Hill
South Dakota.....	F. H. HOFF.....	Mitchell
Tennessee.....	I. C. MCNEILL.....	Memphis
Texas.....	GEORGE H. CARPENTER.....	Brownwood
Utah.....	W. S. RAWLINGS.....	Provo
Vermont.....	MASON S. STONE.....	Montpelier
Virginia.....	JOSEPH EGGLESTON.....	Richmond
Washington.....	HENRY B. DEWEY.....	Olympia
West Virginia.....	MORRIS P. SHAWKEY.....	Charleston
Wisconsin.....	CARROLL G. PEARSE.....	Milwaukee
Wyoming.....	A. D. COOK.....	Cheyenne

Respectfully submitted,

THOMAS C. MILLER, *Secretary*

Z. X. SNYDER, *Chairman*

The report of the committee was received, and the Secretary was instructed, by unanimous vote, to cast the ballot of the active members for the nominees as reported by the committee.

Charles H. Keyes, of the Committee on Resolutions, in the absence of the chairman of that committee, presented the report of that committee as follows which was on motion adopted as read:

DECLARATION

The National Education Association, now holding its Forty-seventh Annual Convention in Denver, representing teachers and friends of education in every state of the Union, makes the following Declaration of Principles and of Aims:

1. A free democracy cannot long continue without the assistance of a system of state-supported schools, administered by the chosen agents of the people and responsible to the people for its ideals, its conduct, and its results. The commanding position of the American people is due largely to the general diffusion of knowledge and culture by its free schools.

2. Our system of state-supported schools must include elementary schools, secondary schools, schools for the training of teachers, colleges, and universities. The changed conditions of the twentieth century also demand the establishment of free schools the purpose of which shall be the training of our youth for commerce and the industries, as well as for the professions.

3. The purpose of our system of free common schools must continue to be chiefly culture for the individual and the transmission to posterity of the results of the investigations and deliberations of the past. Our schools must advance along the lines of educational democracy in the sense that they must provide equal educational opportunities for all. Altho they must give practical preparation not only for the professions, but also for commercial life, the demands of any part of the business world that courses of study be subordinated to particular interests is not in accord with the proper aims of a national system of common schools.

4. A system of common schools that will meet the needs of the times must be democratic in its purpose and its administration; must recognize the importance of expert supervision, of better and more numerous high schools, of better and more numerous schools for the training of teachers, of a merit system for the appointment and promotion of teachers; and it must exclude fraternities and secret organizations of every sort from the social life of the school.

5. The common schools of our country must recognize more fully than ever the necessity of training our youth for citizenship. The perpetuation of democracy depends upon the existence in the people of that habit of will which is justice. Liberty under law is the process for attaining justice which has thus far been most successful among civilized men. The call to citizenship is a call to the exercise of liberty under law, a call to the limitation of liberty by law, and a call to the pursuit of justice, not only for one's self but for others.

6. The National Education Association indorses the purpose of the American School Peace League. The Association believes that the principles of the League will make for effective citizenship, and urges all teachers to acquaint themselves with the work of the League and to co-operate with its efforts and aims.

7. The increased tendency to congestion of population in cities makes necessary greater and more systematic attention to the physical development of our children. No vigorous race of people has long maintained a high state of civilization under conditions that did not make for the physical, as well as the mental and moral, development of its youth. The Association recommends that provision be made by the United States Bureau of Education for effective promotion of physical education thru the diffusion of scientific information on this subject.

8. The National Education Association approves the ever increasing demand for better qualified teachers in the common schools. This higher standard must lead logically to a longer tenure and to a compensation more nearly commensurate with the quality of preparation and with the nature of the service required.

9. The National Education Association heartily indorses the use of school buildings and all school equipment for community interests and social betterment.

10. The National Education Association indorses the movement to consolidate the rural district schools wherever practicable, and expresses the hope that this movement will be encouraged until the children of rural communities shall enjoy the benefits of public education to an extent approximating those now supplied to children of urban communities.

11. The National Education Association gives its hearty indorsement to the work of the National Bureau of Education, the Carnegie Foundation, the General Education Board, and all associations, institutions, and organizations that are working to develop and promote the educational interests of the country.

Respectfully submitted,

EDWIN G. COOLEY, of Massachusetts, *Chairman*

JOHN H. PHILLIPS, of Alabama

CHARLES H. KEYES, of Connecticut

AUGUSTUS S. DOWNING, of New York

SYLVANUS L. HEETER, of Minnesota

Committee on Resolutions

E. O. Vaile, of Illinois, offered the following resolution, and moved its adoption. The motion was duly seconded.

Resolved, That a committee of seven be appointed by the chair to consider and recommend at our next meeting what, if any, new simplified spellings should, in its judgment, be adopted by this Association in its printed literature.

On motion of John MacDonald, of Kansas, the resolution of Mr. Vaile was laid on the table.

NATHAN C. SCHAEFFER, of Pennsylvania: Mr. President, I wish to bring to the

attention of the members a matter which has troubled the officers of this Association for several years. With your permission, I will read a brief statement of the situation, which has been prepared by the Secretary, and move the adoption of the resolution therein contained.

At the time the Association was reincorporated by a special Act of Congress it was found impracticable to introduce into the Special Act all the provisions of the old constitution. Such provisions were therefore transferred to the By-Laws. In making such transfer, it was the purpose not to make any changes in either meaning or phraseology. Consequently it is found that there are a number of inconsistencies and conflicts which should be corrected, and a few changes that should be made. In order that this matter may be carefully considered and that the desired amendments may be acted upon at a future meeting,

Resolved, That a committee of five be appointed by the President to formulate the desired amendments to the By-Laws so that the same may be submitted at the next annual meeting and be finally considered at the business meeting in 1911.

The motion was seconded and carried by unanimous vote of the convention.

The committee appointed by President Harvey is as follows:

F. Oram Lyte, principal, First State Normal School, Millersville, Pa., *Chairman*.

J. Y. Joyner, state superintendent of public instruction, Raleigh, N. C.

E. G. Cooley, president, D. C. Heath & Co., Boston, Mass.

Nathan C. Schaeffer, state superintendent of public instruction, Harrisburg, Pa.

William H. Maxwell, superintendent of schools, New York, N. Y.

CARROLL G. PEARSE, of Wisconsin: There is a matter which has been spoken of a number of times by persons in informal discussion, relative to the disadvantage of having a new Board of Directors, or one so largely new, each year. It has occurred to a number of members that it might be desirable if the directors from each state should serve for a longer time, perhaps for three years, one-third to retire each year. As this would require an amendment to the Articles of Incorporation, I offer the following resolution:

Resolved, That the Executive Committee of this Association be and hereby is directed to seek at the hands of the Congress of the United States, such amendment of that paragraph of Section 6 of the Act of Incorporation which relates to the Board of Directors and their selection as shall provide that the directors by election shall serve for three years, one-third of such directors being chosen each year.

I move the adoption of this resolution. (Seconded.)

AUGUSTUS S. DOWNING, of New York: I move as an amendment that we refer this matter to the Committee on Revision created under the resolution just adopted.

MR. PEARSE: I am entirely willing that my motion shall stand so amended.

The amendment was also accepted by the member who seconded the motion to adopt.

After discussion as to the advisability of referring the matter to a committee or deciding it at the present meeting, J. A. Whiteford of Missouri moved that Mr. Pearse's resolution as amended be laid upon the table. The motion was seconded and carried by a vote of 135 to 54.

W. R. Callicott, of Colorado, introduced the following resolution:

Resolved, That a committee of five be appointed by this Association to investigate and report at the next session on the subject of "Humane Education in the Public Schools."

The resolution was, on motion, laid upon the table.

EDWIN G. DEXTER, Commissioner of Education of Porto Rico: I rise to propose the following resolution, and move its adoption:

Resolved, That the National Education Association place itself on record as favoring the granting of immediate citizenship to the Porto Ricans.

This resolution has no political bearing. It has a very important educational bearing. An important aim of education is education for citizenship. We are trying to educate 100,000 children in Porto Rico without being able to lay before them this aim of citizenship as a

probable realization on their part in the not-far-distant future. Ten years ago American occupation of the Island made the Porto Rican a man without a country. Since that time they have been asking that citizenship be granted to them by the United States.

The motion was duly seconded.

JOHN W. ABERCROMBIE, of Alabama: I move to amend the resolution just offered by adding a statement that we also favor immediate independence for the Philippines.

MISS ELIZABETH SHIRLEY, of California: I would add to the resolution a provision that suffrage be extended to the women of the United States.

AUGUSTUS S. DOWNING, of New York: This resolution introduced by our friend from Porto Rico was before the Committee on the Resolutions of this Association, and was discussed most carefully. We were all agreed that if this resolution were adopted, it would involve the Association in just such an argument as we are involved in now. Commissioner Dexter did not intend that the right of suffrage should be given to the Porto Ricans. I move that the resolution be laid upon the table.

Seconded and carried.

JAMES M. GREEN, of New Jersey: I offer the following resolution and move its adoption:

Resolved, That we express our appreciation of the hospitality shown to our Association by the citizens of Denver, and of the efficiency of the Local Executive Committee in making the arrangements for this meeting.

The motion was seconded and carried after some discussion.

There being no further business, the meeting adjourned.

IRWIN SHEPARD, *Secretary*

MINUTES OF MEETING OF BOARD OF DIRECTORS OF THE NATIONAL EDUCATION ASSOCIATION FOR THE YEAR 1908-9

The annual meeting of the Board of Directors was called to order by President Lorenzo D. Harvey in Trinity Methodist Church, at 3:30 P. M., July 5, 1909. The following members responded to roll-call:

L. D. Harvey, Wisconsin; Arthur H. Chamberlain, California; Nicholas Murray Butler, New York; Irwin Shepard, Minnesota; G. A. Lofton, representing the Board of Education, Tennessee; Elmer Ellsworth Brown, District of Columbia; John W. Cook, Illinois; James M. Green, New Jersey; James M. Greenwood, Missouri; E. O. Lyte, Pennsylvania; Nathan C. Schaeffer, Pennsylvania; A. J. Matthews, Arizona; Duncan MacKinnon, California; Charles E. Chadsey, Colorado; Charles H. Keyes, Connecticut; Miss Clem Hampton, Florida; Walter R. Siders, Idaho; Walter R. Hatfield, Illinois; T. A. Mott, Indiana; John MacDonald, Kansas; Warren Easton, Louisiana; Payson Smith, Maine; Irving O. Palmer, Massachusetts; S. L. Heeter, Minnesota; E. E. Bass, Mississippi; A. E. Reed, Nebraska; R. R. Larkin, New Mexico; A. S. Downing, New York; E. D. Cameron, Oklahoma; Reed B. Teitrick, Pennsylvania; D. B. Johnson, South Carolina; F. H. Hoff, South Dakota; I. C. McNeill, Tennessee; Cree T. Work, Texas; Edward T. Mathes, Washington; H. C. Buell, Wisconsin; A. D. Cook, Wyoming.

Directors present, thirty-seven.

The Secretary reported that several state directors who were unable to attend the meeting had written asking to have other active members from their respective states appointed in their places; and also that in a few other instances directors had been delayed in reaching the convention, leaving vacancies in the Board.

Upon motion duly seconded the following appointments to fill vacancies were made:

J. H. Phillips, of Birmingham, Ala., to succeed J. W. Abercrombie, absent.

B. W. Torreyson, of Arkansas, to succeed George B. Cook, absent.

B. K. Purdum, of Maryland, to succeed M. Bates Stephens, resigned.

John L. Alger, of Rhode Island, to succeed Herbert W. Lull, absent.

D. H. Christensen, of Utah, to succeed William Allison, resigned.

Thomas C. Miller of West Virginia, to succeed R. A. Armstrong, absent.

As all of these appointees were present the total number of directors present was forty-three.

Upon suggestion by the President, it was moved and carried that the reading of the minutes of the last meeting be omitted and that they be approved as printed in the volume of *Proceedings*.

The report of the Board of Trustees, having been printed and distributed among the members, was upon motion received and accepted by the Board of Directors, and recommended for adoption by the active members.

The report of the Treasurer, Arthur H. Chamberlain, as printed and distributed among the members, was on motion accepted and approved by the Board of Directors, and recommended for adoption by the active members.

The Treasurer called the attention of the members to the fact that the receipts of the past year were only \$1,451.40 in excess of the necessary expenditures for the year.

Director Nathan C. Schaeffer, Chairman, presented the report of the committee appointed to consider the communication addressed to the Board of Directors by Mrs. Frances W. Leiter, at its meeting July 2, 1908.

To the Board of Directors of the National Educational Association:

In making its report, the committee, to whom were referred the questions of Mrs. Frances W. Leiter, deems it proper to annex to the several questions the replies prepared for your consideration.

1. "In creating the EDUCATIONAL DEPARTMENT OF NATIONAL ORGANIZATION OF WOMEN, was it intended that these societies petitioning for same should appear at the National Education Association sessions in their *organized capacity*, or in the individual capacity of their members who are active members of the National Education Association?"

In creating the Educational Department of the National Organization of Women, it was not intended that the societies petitioning for the same should appear at the National Education Association sessions in their organized capacity. Under the Charter and By-Laws their members must become active members of the National Education Association in order to secure the right to vote, to hold office, and to claim the privilege of the floor at the meetings of the new department.

2. "Was it intended that all, or part, of the national organization of women who were instrumental in petitioning for creation of the department should have power, *in effect*, to make this National Education Association Women's Educational Department *exclusive*, so far as other national societies of women are concerned, which also have educational bearing, and have representation in the National Education Association by *active membership*?"

The new department cannot be made exclusive, but all active members of the National Education Association are members of said department.

3. "Was it intended that the societies taking an initial step toward this department should, because of this initial step, continue to have controlling power in, and jurisdiction over, the department, so far as plans, policies, and elections are concerned?"

The societies taking the initial steps in the organization of the department cannot have controlling power in and jurisdiction over the department, so far as plans, policies, and elections are concerned. Their members can become members of the new department only by becoming members of the National Education Association.

4. "Does it not come under the constitutional law of the National Education Association that any national organization of women, with active National Education Association membership, by virtue of these active members, *may voluntarily become a part of this department*—its active members having equal power with active members of all other similar societies—*of vote and discussion*—whether in the list of initial organizations or not?"

5. "Where a national society has an educational department, are superintendents, or committee members, of the same department, *in state and local capacity*, eligible to active membership in the National Education Association?"

Any national organization having an educational department, or distinctive educational aims, can join the National Education Association, as libraries and other educational organizations now join the National Education Association. They can send a representative who will be permitted to speak (and vote) as other active members in case the organization acquires active membership.

If the above is not satisfactory to the organizations, they can hold the same relation to the National Education Association as the Herbart Society for the Study of Education now holds. Its program is printed and circulated with the National Education Association program, but its proceedings are printed separately; and no place is given to these in the annual volume of *Proceedings*, nor is any money appropriated for expenses out of the treasury of the National Education Association.

Respectfully submitted,

NATHAN C. SCHAEFFER
AUGUSTUS S. DOWNING
EDWIN G. COOLEY

Upon motion, the report of the committee was received and adopted.

The President next called for the report of the Committee on Investigations of Manual-Training Courses, which was presented by the Chairman, Charles H. Keyes.

CHAIRMAN KEYES: Your committee recommends that copies of this report be printed and circulated as soon as possible. Two years ago at a joint session of the Departments of Manual Training, of Art Education, and of Child-Study, a paper was read showing the inconsistency of allowing courses of study to be built by allowing the manual-training teacher to suggest one part, the art teacher another, and so on. This practice is responsible for most of the incongruous courses of study that are today being inflicted upon schools thruout the country.

A committee of investigation was appointed to consider and report on courses of Manual Training in Public Schools, and this Board of Directors appropriated \$500 for carrying on the work for two years. It was felt that the committee was not large enough nor representative enough. Last year we asked the Board of Directors to increase our membership to not less than fifteen nor more than twenty. Since then the committee has

held meetings in Albany, Chicago, New York, Springfield, and elsewhere. The committee has taken the position that it would not use any of the money which you appropriated for the purpose of paying the expenses incurred by members in attending these meetings, and so we have submitted bills only for printing, telegrams, postage, and stenographic work—practically \$175. At least \$325 of the amount you appropriated is still unexpended. This is probably ample to cover the cost of printing the report if not more than 5,000 copies are wanted. If the edition has to be a thousand larger, the amount might fall short from \$25 to \$100. We propose to turn this balance of \$325 back into the treasury. The individual members have paid their own expenses. Not one cent has been expended for transportation or personal expenses. I hope, in light of the statement that has been made, you will decide to print the report, which covers about 64,000 words and, it is estimated, would make about an eighty-page document.

Our purpose in wishing to have this report printed and distributed is that we may have the criticism of the members, destructive, if it is deserving of that sort, or constructive, if that is what is needed. I think the character of that committee is warrant for my saying that I believe it is one of the most valuable reports prepared by any committee commissioned by this body in the last twenty years. It seems to me that it does for the cause of manual and industrial training a service that is probably as valuable or very much more valuable than was the report of the Committee of Seven in the field of history.

Upon motion, it was decided to carry out the request of the committee, and the Secretary was authorized to print an edition sufficiently large to supply the active members.

Alfred Bayliss, of Illinois, Chairman of the Committee on Reorganization of Departments, being called upon for the report of his committee, stated that some matters which had come up at a late date made it advisable to postpone the presentation of their report until the meeting of the new Board of Directors. Upon motion, the request was granted.

PRESIDENT HARVEY: We are now ready to take up any new business.

SECRETARY SHEPARD: We have two communications with reference to the traveling scholarships, adopted by resolution at the last meeting of the Board of Directors. In both of these communications I am asked for a statement of conditions necessary to enable the writers to qualify for appointment. As the conditions have never been formulated, I was unable to answer their inquiries, so simply present their letters.

DIRECTOR NICHOLAS MURRAY BUTLER, of New York: In view of the fact that the establishment of these traveling scholarships must be dependent upon whether funds for their maintenance are available, I suggest the reference of these communications, and any similar ones that may be received, to the Committee on Investigations and Appropriations of the National Council for recommendation. In accordance with the administrative plan for these scholarships adopted last year, this committee has full authority to put the plan into effect whenever it is determined by the Trustees that the necessary funds for the maintenance of the scholarships are available.

On motion the recommendation of Director Butler was adopted.

SECRETARY SHEPARD: In 1906 action was taken establishing the Department of Technical Education. Some doubt was expressed as to the wisdom of creating a department on the lines announced, but the department was created. A tentative program was presented at Los Angeles, but with some difficulty. Again at Cleveland a partial program, and a very good one, was presented. This year the president, who had been prominent in urging the establishment of the department, and who had been its president each year since organization, Dean Monin, of the Armour Institute of Chicago, has found it impossible to prepare a program, and writes a letter saying that he does not see any use of continuing the department as an independent organization, and recommends that it be combined with the Department of Manual Training.

Upon motion of Director Augustus S. Downing, of New York, the matter was referred to the Committee on Reorganization of Departments, of which Alfred Bayliss, of Illinois, is chairman.

Secretary Shepard brought to the attention of the Board of Directors the fact that a misunderstanding had arisen with the Department of Indian Education because of the enforcing of the rule that admission to department meetings should be limited to members only. He explained that Miss Reel's relations with the Department of the Interior made

her position rather unusual. The Department of the Interior wishes to have all meetings of her department open to the public, which would be contrary to the rule being enforced at all other department meetings. Secretary Shepard suggested that inasmuch as this condition was not thoroughly understood before the convention, it might be advisable, in order to relieve the present embarrassment, to suspend the rule regarding admission, so far as the Department of Indian Education is concerned, during the remainder of the convention.

On motion of Director Charles H. Keyes, of Connecticut, the rule regarding admission was waived for the remainder of the convention, so far as the Department of Indian Education was concerned, and the entire matter referred to the Committee on Reorganization of Departments.

DIRECTOR NICHOLAS MURRAY BUTLER, of New York, Chairman of the Board of Trustees: I am instructed by the Board of Trustees to report a design for an official seal for our corporation. It is provided in the Act of Incorporation that there shall be a seal, and the Board of Directors at the meeting in Los Angeles instructed the Board of Trustees to procure such a seal. I have here a few prints of a design by Frank D. Millet which shows the "little red schoolhouse" as its distinctive feature. I am instructed by the Board of Trustees to report this design and to recommend its adoption as the official seal of the Association.

On motion, the seal was adopted as the official seal of the Association.

Director Butler then brought up the matter of electing to corresponding membership in the Association certain educators who live and work in foreign countries. He presented a list of distinguished gentlemen whom he, in consultation with other members of the Association, had selected as worthy of being elected to such a position, giving a brief outline of the qualifications of each gentleman and his official position. Upon motion, the following named educators were elected as corresponding members of the National Education Association:

NAMES OF CORRESPONDING MEMBERS ELECT OF THE NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

For England

ALFRED MOSELY, C.M.G., Union Bank Buildings, Ely Place, London, E. C.
 PROFESSOR HENRY E. ARMSTRONG, 55 Granville Park, Lewisham, S. E., London.
 J. STRUTHERS, Secretary to the Committee of Council on Education in Scotland,
 55 Whitehall, London.
 R. BLAIR, care of Education Department, Victoria Embankment, London, W. C.
 H. T. GERRANS, Bursar of Worcester College, Oxford.
 SIR EDWARD HENRY BUSK, Vice-Chancellor of the University of London.
 T. GREGORY FOSTER, Provost of University College, London.
 HENRY JONES, Professor of Moral Philosophy in the University of Glasgow.
 J. ST. LOE STRACHEY, Editor of the *Spectator*, London.

For Denmark

OTTO JESPERSEN, Professor of English Philology in the University of Copenhagen.
 HARALD HÖFFDING, Professor of Philosophy in the University of Copenhagen.

For Germany

ULRICH VON WILAMOWITZ-MÖLLENDORFF, Professor of Classical Philology in the
 University of Berlin.
 PROFESSOR DR. W. PASZKOWSKI, Director of the Bureau of Information, University
 of Berlin.
 PROFESSOR DR. F. KLEIN, Professor of Mathematics in the University of Göttingen.
 GEHEIMRAT DR. FRIEDRICH SCHMIDT, Ministerial Director, Cultus Ministerium, Berlin.
 GEHEIMRAT DR. REINHARDT, Cultus Ministerium, Berlin.
 PROFESSOR DR. H. MÜNCH, Professor of Education in the University of Berlin.

For France

M. LOUIS LIARD, Vice-Rector of the University of Paris.
 M. ERNEST LAVISSE, Director of the Ecole Normale Supérieure, Paris.
 PROFESSOR EMILE BOUTROUX, Director of the Fondation Thiers, Paris.

After announcement of state meetings of active members for the purpose of election of members of the nominating committee, the meeting adjourned.

IRWIN SHEPARD, *Secretary*

MINUTES OF MEETING OF THE NEW BOARD OF DIRECTORS FOR THE YEAR 1909-1910

The meeting was called to order Thursday P. M., in Trinity Methodist Church, by President-elect J. Y. Joyner, of North Carolina. The following members responded to roll-call:

J. Y. Joyner, North Carolina; L. D. Harvey, Wisconsin; Arthur H. Chamberlain, California; Nicholas Murray Butler, New York; Irwin Shepard, Minnesota; Elmer Ellsworth Brown, District of Columbia; John W. Cook, Illinois; James M. Green, New Jersey; James M. Greenwood, Missouri; E. O. Lyte, Pennsylvania; Nathan C. Schaeffer, Pennsylvania; S. S. Murphy, Alabama; A. J. Matthews, Arizona; Duncan MacKinnon, California; C. E. Chadsey, Colorado; Charles H. Keyes, Connecticut; Miss Clem Hampton, Florida; Miss S. Belle Chamberlain, Idaho; J. Stanley Brown, Illinois; T. A. Mott, Indiana; Frank L. Smart, Iowa; John MacDonald, Kansas; W. H. Bartholomew, Kentucky; Warren Easton, Louisiana; A. C. Willison, Maryland; Irving O. Palmer, Massachusetts; E. E. Scribner, Michigan; S. L. Heeter, Minnesota; Howard A. Gass, Missouri; W. E. Harmon, Montana; A. H. Waterhouse, Nebraska; M. H. Kinsley, New Jersey; J. E. Clark, New Mexico; A. S. Downing, New York; W. S. Snipes, North Carolina; Thomas Hillyer, North Dakota; J. W. MacKinnon, Ohio; Lynn Glover, Oklahoma; Reed B. Teitrick, Pennsylvania; D. B. Johnson, South Carolina; I. C. McNeill, Tennessee; George A. Carpenter, Texas; W. S. Rawlings, Utah; Joseph Eggleston, Virginia; Carroll G. Pearse, Wisconsin; A. D. Cook, Wyoming.

Directors present, forty-six.

PRESIDENT JOYNER: The first business is the appointment of a Committee on Membership in the National Council. There are ten vacancies caused by expiration of terms.

The President, being authorized by motion to appoint the committee, named the following: Director J. M. Greenwood, of Kansas; Director D. B. Johnson, of South Carolina; Director C. G. Pearse, of Wisconsin.

Director A. S. Downing presented the report of the Committee on Traveling Scholarships, appointed by the former Board of Directors, as follows:

To the Directors of the National Education Association:

The Committee on Investigations and Appropriations to whom was referred the applications of Miss Amalie Hofer and Mrs. Mary D. Bradford, both as candidates under the National Education Association's Traveling Scholarship Act of 1908, submit the following statement of facts: (1) Amalie Hofer asks to be sent to Switzerland for the purpose of translating the complete works of Pestalozzi, a greater part of which is partial dialect writing; (2) Mary D. Bradford wishes information as to what is necessary to qualify for a traveling scholarship in order that she may make application in due form.

In view of the uncertainty of the financial outlook of the National Education Association, the Committee recommends that the said applicants be informed by the Secretary of the Association that no appropriation can be made to the Traveling Scholarship Investigation at this session.

Respectfully submitted,

J. M. GREENWOOD, *Chairman*
AUGUSTUS S. DOWNING
L. D. HARVEY
NICHOLAS MURRAY BUTLER
J. H. PHILLIPS
F. A. FITZPATRICK

The report was on motion accepted and adopted.

The Committee on Investigations and Appropriations of the National Council, being called, reported that they had no recommendations to make.

Alfred Bayliss, of Illinois, Chairman of the Committee on Reorganization of Departments, created by vote of the active members at their annual meeting at Detroit, Mich., July 11, 1901, next presented the following report:

CHAIRMAN BAYLISS: The report of this Committee has been in abeyance for a number of years, as most of you are aware. The reason for this might be interesting if the hour were not late and time were not so valuable. The Committee received a notice early in the year from President Harvey to formulate some report, and the following is the result:

REPORT OF COMMITTEE ON REORGANIZATION OF DEPARTMENTS

To the Board of Directors of the National Education Association:

Your Committee on the Reclassification of the Departments of the National Education Association presents the following report:

The Committee recommends:

First, That the Department of School Administration be consolidated with the Department of Superintendence; the Department of Child-Study with the Department of Normal Schools; the Department of Business Education and Science Instruction with the Department of Secondary Education; the Departments of Manual Training and of Rural and Agricultural Education with the Department of Technical Education, and the Department of Kindergarten Education with the Department of Elementary Education.

It further recommends that the Departments of Art Education, Music Education, Special Education, and the Library Department be discontinued as such, their subjects being intimately associated with the other subjects of Elementary, Secondary, and Higher Education.

Second, That the Department of Indian Education be cordially invited to continue to hold its meetings with the National Education Association, and to maintain an affiliated relation corresponding to that of other societies and associations now meeting with this Association.

Third, That the consolidated Department of Child-Study and Normal Schools be hereafter designated as the Department of Professional Preparation of Teachers.

Fourth, That the Department which shall include Manual Training, Rural and Agricultural Education, Technical Instruction, and Domestic Science (the last named not represented as such in the present organization) be designated as the Department of Industrial Education.

Fifth, That the Department of Women's Organizations be designated as the Department of School Patrons.

Sixth, That the regular Departments of this Association be as follows until otherwise ordered by the Board of Directors:

1. The National Council of Education.
2. The Department of Superintendence.
3. The Department of Professional Preparation of Teachers.
4. The Department of Elementary Education.
5. The Department of Secondary Education.
6. The Department of Higher Education.
7. The Department of Industrial Education.
8. The Department of School Patrons.

Your Committee believes that the adoption of the foregoing recommendations will, without too great sacrifice of potential contributions of permanent value, materially reduce the cost of publication and distribution of the *Proceedings* of the Association—a matter of primary importance at this time; that it will lessen the confusion of interests and dissipation of energy consequent upon the present multiplicity of departments, and clear the ground for a more logical and efficient future development.

Furthermore, that inasmuch as the future may disclose the need or wisdom of departments based upon groups of related subjects, especially, perhaps, in secondary, higher, and technical education, the Committee is of the opinion that, if directed to continue this work, the membership should be increased by the addition of the President of the Association, the retiring President, and the former President upon whose initiative this report was undertaken, the last two of whom have aided this work so far done at every step of its progress.

Respectfully submitted,

(Signed) ALFRED BAYLISS, *Chairman*
BEN BLEWETT
NICHOLAS MURRAY BUTLER

I am instructed by the Committee to move the adoption of the report. Seconded.

DIRECTOR I. C. MCNEILL, of Tennessee: I was present yesterday at a joint meeting of the Department of Manual Training and the Department of Art Education. They

agreed to consolidate. The arguments for merging were quite clear and seemed to me quite satisfactory. It may be that some of the groups named in the report would not, of their own notion, come together just as the Committee suggests here; but I believe this report is a move in the right direction, and that, after some little friction which may possibly result, the changes will be found satisfactory to everyone concerned.

DIRECTOR JOHN W. COOK, of Illinois: I would like to hear a stronger argument for the discontinuance of the Departments of Art Education, Music Education, Special Education, and the Library Department. Are we not taking a very radical step in eliminating these departments? I have no special argument to offer for the continued maintenance of the departments mentioned except those of Art and Music. I know that in our schools we consider these two branches very important, and I should like to hear some good reason given why the National Association should give them up before I vote on the adoption of the report.

ARTHUR H. CHAMBERLAIN, of California: On the appointment of J. E. Addicott, president of the Department of Manual Training, and Miss Florence E. Ellis, president of the Department of Art Education, I served as chairman of a joint committee to consider the merging of these two departments into one. I presented the committee's report at a joint meeting yesterday, and it was the almost unanimous opinion of those there assembled that it would be decidedly to the advantage of the schools and of those who are teaching art and manual training if the departments were merged; that art training, as such, had not been doing the work it should be doing, and that manual training would be very much strengthened and improved by closer relations with the art work. I think the art department should be merged with that of manual training, and not discontinued.

DIRECTOR COOK: I should offer no serious objection to the merging of the Department of Art Education with the Department of Manual Training. I am thoroly in favor of a very much closer and more important relation between the art work and the manual training; but to discontinue the art department seems to be a great mistake. I move that the report of the Committee be amended so as to authorize merging the Department of Art Education with the Department of Manual Training, and to continue the Department of Music Education in its present form. That is, I would have Art included in the new Department of Industrial Education, and the Department of Music Education made the ninth department in the new organization.

CHAIRMAN BAYLISS: I am authorized to say that the Committee on Reorganization of Departments will accept the amendment offered by Director Cook.

PRESIDENT JOYNER: The amendment has been accepted by the Committee. What is your pleasure?

DIRECTOR ELMER ELLSWORTH BROWN, of Washington, D. C.: I am very much interested in this report. It seems to be a document which has been prepared with much care. However, there may be points of view which the Committee has possibly not considered. Therefore I would suggest that the report be accepted as a report of progress, printed for distribution as soon as possible, and considered by the members during the year, to be finally acted upon at a later meeting.

DIRECTOR T. A. MOTT, of Indiana: I should like to have the report accepted as it is, the same to apply for the coming year.

DIRECTOR BROWN: It seems to me it would be entirely practicable to make certain combinations of departments for our next meeting, but not to put in force the report exactly as suggested by the Committee. I would like to suggest another point of view. I take it that what we are trying to do here is primarily to avoid getting too large a volume of *Proceedings*, and to prevent the carrying on of departments which may be simply interesting in their discussions, but which are not making any substantial contributions to our literature. The point of view has been considered by the Committee, I suppose, that any department which gives evidence of doing good work, and whose meetings attract as large audiences as can conveniently be handled, should not be discontinued. One other thing:

Is it not practicable for us, without making such a reduction of our departments as might possibly be injurious, to consider seriously the question of not publishing everything that is said at our meetings—of making our volume of *Proceedings* a representative volume of the best things that are said in each department, very much as is done by the American Association for the Advancement of Science? I therefore move, as a substitute for the pending motion, that the report be accepted as a report of progress; that it be printed and distributed to the active members, and that it be voted upon at the next annual convention.

DIRECTOR MCNEILL: At one time Congress was considering the matter of specie payment. After a long-drawn-out debate, one member said: "The only way to resume is to resume." And so I think the way to get ahead in this matter is to adopt this report.

A DIRECTOR: I think the general membership of the Association should have some notice of the proposed change of departments, and I believe that it is wise, before we take any such radical step, that those who are deeply interested in those departments should have some notice. I believe they would feel better about it. I take it that is one of the objects of the motion made by Commissioner Brown.

DIRECTOR L. D. HARVEY: I think there are one or two reasons not yet stated which may count in favor of the report of this Committee. This year there has been rather serious difficulty on the part of the heads of several departments in making up programs that the officers themselves felt would be satisfactory. For instance, the Department of Technical Education found it impossible to make up a program, and so none was presented for this meeting. The Department of Kindergarten Education found extreme difficulty in finding in this country people who would attend this convention and appear upon the program. This can be easily accounted for by the fact that there is a National Kindergarten Association which attracts the kindergartners of the country, and they find it impracticable to attend two meetings. In the Department of Art Education, there is some difficulty in securing an attendance and members to appear on the programs, growing out of the fact that there is an Eastern Art Teachers' Association, a Western Art Teachers' Association, and a Pacific Coast Art Teachers' Association. It was some of these matters, I think, that were in the minds of the Committee when they framed this report. They feel that it is better to concentrate our work upon elementary, secondary, and higher divisions, and that occasionally when these questions of special lines of work come up, they could be treated under these general departments. With the reduction in the number of departments, it will be entirely feasible to hold a larger number of sessions at each meeting, so there would be a wider opportunity for these different subjects to be represented. I am glad to see the art teachers and manual-training teachers making an effort to combine forces. It means an active effort on their part to relate their work as it has not been related in the past. If we continue the art department, I think it should be merged with the manual-training department. I do not believe in eliminating any department of this Association for which there is any real demand.

DIRECTOR JAMES M. GREEN, of New Jersey: I think the object of the Committee was in part to make such consolidations as would decrease the expenditures for meetings of so many heads of departments, etc.; that we could materially reduce our expenses by not keeping up so many departments. I also understand that it is not the object of the Committee in any sense to decrease the interest in the work of the departments that are done away with. Each department still has its place in the general departments of elementary, secondary, or higher education, and it can be recognized on the program; so that it is only a question of drawing in—of beginning over on new lines. I would like to see still other departments—for instance, one of engineering—but I do not believe it is wise at the present time to attempt to create them. I believe the report of the Committee is a very good report at this time.

DIRECTOR CARROLL G. PEARSE, of Wisconsin: It seems to me that the matter is one of such importance that the motion of Director Brown is very pertinent. I do not think

the Board of Directors should act until they have had time to hear from the members of the Association. I am myself undecided as to some features of the report. I should like more information before I am compelled to act. We should be given this opportunity to think over the matter and have it in print before us for a year.

DIRECTOR CHARLES H. KEYES, of Connecticut: I believe it will be to the advantage of the Association if further combinations can be made for the ensuing year. If Director Brown's suggestion is acted upon, we will have all these several programs for the next year. We should make final disposition of this matter before the departments elect their officers for the ensuing year.

President Joyner announced that two motions were before the house—one to accept the amended report, and a substitute for that motion to the effect that the report be printed for the consideration of the active members during the year and voted upon at the next meeting.

The substitute was voted upon first, it being necessary to take the count. The substitute was lost by a vote of 23 to 15.

DIRECTOR BROWN: Just one word explaining why I shall be obliged to vote against the report. I am in favor of the general sort of reorganization presented by the report. But while this report has been considered some years by the Committee, it has been considered less than thirty minutes by the Board of Directors, and yet it is the most far-reaching reorganization of the Association that has been undertaken in years.

The original motion as amended was then voted upon and adopted.

DIRECTOR NICHOLAS MURRAY BUTLER, of New York: Mr. President: I move that the Committee be continued and enlarged by the addition of yourself, sir, the retiring President, Director L. D. Harvey, of Wisconsin, and Director James M. Green, of New Jersey.

The motion was carried.

DIRECTOR KEYES: I suppose there will be no change in the programs for the next year?

PRESIDENT JOYNER: My understanding is that the programs for the next year will consist of the number of departments contained in the report as amended and adopted—namely, nine.

SECRETARY SHEPARD: I should like to ask who are to be the officers of the new departments?

DIRECTOR MCNEILL: That is taken care of very nicely by the exact wording of the report. It says "consolidated with;" therefore the officers of the department that is retained are the officers who would hold for the new department. There might be some difficulty, however, where you have given a new name to the combined department.

DIRECTOR AUGUSTUS S. DOWNING, of New York: I move that the entire matter of carrying out the action of the Board of Directors be referred to the Executive Committee with power to act.

Seconded and carried by unanimous vote.

The Committee appointed at the opening of the session to nominate candidates for the vacancies in the membership of the National Council presented their report, which was as follows:

To the Members of the Board of Directors:

Your Committee finds that the terms of membership of the following named expire with this meeting:

JOHN MACDONALD, Topeka, Kansas
ALMA L. BINZEL, Salt Lake City, Utah
M. E. DAILEY, San José, California
S. L. HEETER, St. Paul, Minnesota
CHARLES MCKENNY, Milwaukee, Wisconsin
W. T. HARRIS, Washington, D. C.

BENJAMIN IDE WHEELER, Berkeley, California
WILLIAM H. MAXWELL, New York, N. Y.
E. G. COOLEY, Boston, Massachusetts
H. J. ROGERS, Albany, New York

The Committee recommends that all of the above named be re-elected for the term of six years excepting as follows:

That C. O. MERICA, of Laramie, Wyo., be nominated to succeed M. E. Dailey, of California, and

That W. R. SIDERS, of Pocatello, Idaho, be nominated to succeed William H. Maxwell, of New York.

J. M. GREENWOOD
D. B. JOHNSON
C. G. PEARSE, *Secretary*

Upon nomination of Director Nicholas Murray Butler, of New York, J. M. Greenwood was elected member of the Board of Trustees for four years, to succeed himself.

Upon nomination of Director Downing, J. H. Phillips, of Alabama, was elected member of the Executive Committee for one year, to succeed himself.

PRESIDENT JOYNER: The next order of business is the very interesting one of receiving invitations for the Convention of 1910. Will you take any action as to limitation of speeches?

Upon motion of Director Greenwood, the speeches of invitation were restricted to five minutes each.

Permission was granted Director James M. Green to speak first. He assured the Association that they would be welcome to meet in Asbury Park if they decided to go to the eastern coast next year.

Director Duncan MacKinnon, of California, in a few words introduced Thomas E. Hayden, member of the board of education of San Francisco, who gave the Association a most cordial invitation to meet in San Francisco in 1910. Among the other inducements offered was the statement that the state of California would guarantee 7,000 members for the Association at \$2.00 each, and also that a round-trip railroad rate of one fare would be secured from the transportation lines.

Stratton D. Brooks, of Boston, assured the Association that Boston enjoyed having the teachers with them in 1903, and would be glad to see them again at the earliest date that they wished to come.

Curt M. Treet, secretary of the Chicago Association of Commerce, was introduced and spoke earnestly in support of the invitation of Chicago for the Convention of 1910.

Secretary Shepard reported the receipt of letters of invitation from different cities, as follows: New Orleans, Niagara Falls, and Cincinnati, but no one was present to support these invitations personally.

Director Carroll G. Pearse introduced Mr. Cannon, of Milwaukee, who invited the Association to come to that city in 1910. He spoke of the central location of the city, and the fact that 1,000 successful conventions had been held there in the last twelve years, and 72 this year.

There was some discussion as to whether the matter of selection of the next meeting-place should be referred directly to the Executive Committee with power to act, or whether a vote of preference be taken, this report not to be binding in case the investigations of the Executive Committee make it seem best to hold the meeting at some place other than the one preferred by the majority of the directors. It was finally decided on motion to take a vote of preference. The result of a vote of preference by roll-call was: San Francisco, 21; Milwaukee, 10; Boston, 4; not voting, 3.

Director Greenwood offered the following resolution in honor of Dr. Harris:

Resolved, That the President, in the name of the Association, send a message of love and affection to Dr. William T. Harris as a token of our appreciation of him as a man, and of his great service to the cause of education in the United States and thruout the world;

and that it is our earnest hope that he will soon be restored to health, to the end that we may have him with us in our deliberations to give us counsel and inspiration.

Following the unanimous passage of the resolution, Director Butler read a telegram which he had received from Dr. Harris extending love and best wishes to the Association corporately and individually.

The meeting then adjourned.

IRWIN SHEPARD, *Secretary*

GENERAL SESSIONS OF THE ASSOCIATION

PAPERS AND DISCUSSIONS

PRESIDENT'S ADDRESS

THE NEED, SCOPE, AND CHARACTER OF INDUSTRIAL EDUCATION IN THE PUBLIC-SCHOOL SYSTEM

LORENZO D. HARVEY, PRESIDENT OF STOUT INSTITUTE, MENOMONIE, WIS.

Education has for its purpose the development of those powers of the individual that may be made effective for useful ends, and the development or creation of tendencies to exercise these powers for those ends.

This statement tho brief is comprehensive. The realization of this purpose involves the play of those activities thru the exercise of which any power—mental, moral, or physical—is developed and made effective, and thru which native tendencies are strengthened or weakened and new tendencies acquired.

The educational process involves knowing, not for the sake of knowing, but for the sake of doing because of the knowing, and for what one may come to be as a result of the doing because of the knowing. Knowledge is useful only as it affects conduct—conduct in its broadest sense, not merely moral conduct, but physical and mental conduct as well.

The elementary conditions of knowing are practically the same for all human beings, and as the beginning of education is found in knowing, so the educational process in its beginnings may be practically the same for all. Human experience has shown that there are certain forms of activity common to all, and therefore the educational process in its elementary stages may be similar not only in the field of the knowing but in the field of doing. Since all well-directed physical activities of different kinds are initiated, guided, and controlled by mental activity, the importance of the latter becomes apparent. This may perhaps explain why in educational effort in the past, the development of mental power has been the chief end sought.

MISTAKES IN EDUCATIONAL PROCESSES

In educational work two mistakes have been made: one is the assumption that the development of mental power dissociated from any other form of activity is an adequate preparation for efficiency in other forms of activity. In other words, the mental activity has not been carried over and made effective in physical or moral activity. The other mistake has been in the assumption that mental activity was best secured thru dealing with symbols and largely ignoring the things symbolized. Words have been the symbols chiefly used

to incite and develop mental power. Here and there along the pathway of educational progress our attention has been called to the importance of the study of things and of processes in dealing with things. Their value as a stimulus for mental activity has been pointed out, but it is only recently that there has come to be any general conviction that organized, directed effort in doing in the field of motor activity may be made a fruitful source of stimulus for the development of mental power.

I have already stated that purposeful physical activity must be initiated, guided, and controlled by mental activity. But this does not preclude the possibility of securing, thru this physical activity, a reorganization of one's knowledge and a further development of mental power.

THE DEVELOPMENT OF SPECIAL TYPES OF EDUCATION

The field of human knowledge is so broad, the demands of society are so multiform, and the activities necessary to meet these demands so varied, that no one individual can hope to master the entire field covered by educational effort. For this reason educational institutions have arisen whose scope has been limited to a somewhat narrow field. They have been organized to furnish the facilities deemed necessary for the training of particular forms of activity for effectiveness in a definite field of effort. For this purpose divinity schools, law schools, medical schools, scientific schools, classical schools, art schools, music schools, engineering schools, schools of agriculture, and here and there trade schools have come into existence. Each of these schools has its definite purpose—the training of individuals thru the development of certain forms of power for effectiveness in particular fields of the world's work. Each has come in response to a definite demand. Each new type of school has been opposed at the outset by individuals who feared that its field of effort would trench upon the field which it was assumed was already occupied by some other institution or institutions of different type. Time has shown that these fears were groundless. Each new institution has found a place for itself. Its clientage has come, not largely from those either connected with other institutions or who might be connected with them, but chiefly from the large number who, but for the new type of school, would not have been found in any institution devoted to systematic educational effort beyond the elementary or secondary stage.

WIDESPREAD DEMAND FOR INDUSTRIAL EDUCATION

In very recent years a widespread demand has arisen for what is termed industrial education. The remarkable thing about this demand is that it is not a local demand. It exists in every part of the country, in urban and rural communities alike; the demand comes from all classes of people, the farmer, the professional man, the manufacturer, the laboring man, and the student of education. It means different things to different individuals, but to all it means something which does not now exist in our present system in any adequate form. To the farmer it means education that will fit the boy to become

a more effective farmer and that will present inducements to him to remain upon the farm; to the manufacturer it means training that will give him skilled workmen and more efficient foremen and superintendents, or the kind of scientific training that fits one for the research work necessary for the discovery of new or improved industrial processes; to the professional man it means a rather indefinite broadening of educational opportunities; to the laboring man, a better opportunity for his children than he has had; to the student of education it may mean any one or all of these and very much more.

For a number of years the programs of this association and of many of its departments have given a prominent place to discussions of industrial education. Had these topics appeared at but one meeting of the association, they might have been attributed to the bias of the individuals who happened to be responsible for the program for that year; but appearing as they have year after year, and not only in this association, but in practically every state association meeting that has been held in a number of years and in associations of men engaged in various fields of industrial activity, supplemented by discussion in the leading magazines and papers of the country, it is clear that its prominence in the educational world today is due to a widespread feeling that the time has come to extend the facilities for education to meet the needs of those who are not now securing in our educational system the kind of training that fits them for efficiency in life. It is not enough to say that present facilities in scope and purpose are ample enough. The fact remains that the existing schools, no matter how excellent their organization and purpose may be, do not appeal to thousands of young people in this country with sufficient strength to hold them in these schools until they could realize the whole benefit to be derived from them. The demand is for something that will appeal to *them*. It is probable that if all the different forms of industrial education advocated in various quarters were to be freely and generously offered, there would be much disappointment, because for one reason or another there would still be thousands who would not avail themselves of these educational means. And yet if other thousands would avail themselves of such means, that would be ample reason for furnishing them.

PURPOSE AND SCOPE OF INDUSTRIAL EDUCATION

Up to the present time no definition of industrial education has been framed that has met with general acceptance; and years may yet elapse before any single definition shall be accepted as entirely adequate. When, however, we come to consider industrial education as entitled to such recognition and place in our educational system as will adapt it to meet present and future needs, it is desirable to state in a broad way its general purpose.

With this end in view I can do no better than to quote with slight modification the statement by the Committee of the National Education Association on Industrial Education in Schools for Rural Communities. That statement is as follows:

Industrial education has for its purpose the acquiring a body of usable knowledge of greater or less extent relating to industrial conditions, processes, and organization, and to the administration of industrial affairs; involving the gaining of some skill in the use of such knowledge, and securing mental, aesthetic, and ethical training thru the acquisition and use of the knowledge indicated.

It will be observed that this statement of the purpose of industrial education makes no claim as to its adequacy for all, and no demand that it shall displace other forms of education. It is simply an effort to set forth a distinct field of educational effort not heretofore fully occupied, and to state in rather general terms the content of that field; in other words, to do for industrial education what has been done for medical education, legal education, engineering education, in practice at least. It does not include all of education, but indicates the field that industrial education in its various phases should occupy as a part of our educational system. It does not undertake to say when nor where industrial education shall be begun, nor what phases of it any individual shall undertake to master, nor when the efforts of the individual in this field shall end.

It will be noted that the view of industrial education presented by this statement is rather broader than appears in most of the discussions pertaining to this subject. In the main, these discussions, no matter what their source, have, up to the present, been confined chiefly to a consideration of what is needed and what is necessary to meet that need in the education for *skill in industrial processes*. It must be evident that any attempt properly to treat the subject of industrial education would be entirely inadequate if confined simply to a consideration of industrial processes, whether on the farm, in the factory, or in the home.

I am not attempting now to state the most immediate need, nor the one which should first be met, but as well as I am able, to present, in outline at least, what is essential for the final organization of the entire field of industrial education that may be worthy a place in our system with other kinds of special education.

INDUSTRIAL CONDITIONS

It must be clearly evident to all who have studied the industrial problem from the standpoint of the employer, or of the employee, or from the standpoint of the student of education, that one of the greatest needs today in the industrial world is a more definite, widespread, detailed knowledge of industrial conditions and a better appreciation of how these conditions affect production, the individuals employed in production, and the distribution of products, as related to the economic, social, and ethical welfare of the producers, and as related to the welfare of society at large.

Almost every community affords examples of industrial undertakings in which large sums of money have been expended and which have proved failures, because those responsible for the undertakings did not have a knowledge of those industrial conditions, that might have been gained, and which

doomed the experiment to failure from the outset. Had a proper study been made of these conditions, the failure of the experiment might have been averted, or means might have been employed, that were not employed, to anticipate these conditions and to adjust effort to meet them.

A proper study of industrial conditions in any one of these cases would have taken into account the demand for the product; the probable permanency of that demand; its increase due to increase of population, or to the increase of wealth in the communities to be supplied; the proximity to the market; accessibility to that market on equal terms with competitors in other fields; possible modifications of mode of transportation of the product and of similar products produced elsewhere, to the same market; the available supply of raw material at competitive cost; the facilities for manufacturing the product as compared with other localities; the availability of a continuous, adequate supply of skilled labor; the liability to labor difficulties and interruption of the supply of labor.

This last would involve a study of labor conditions, the extent and character of labor organizations in the community, their relations to other organizations, the grounds for the demands of those organizations, the reasonableness or unreasonableness of these demands, and the effectiveness with which these demands could be made, together with the likelihood of modifying them by possible concessions or compromises.

A study by employers of the conditions out of which labor organizations have sprung and which have given rise to the demands of these organizations, of the conditions of life of the laborer and his family, of how far these conditions are the fault of the laborer or of industrial or social conditions or of statutory enactment for which he is not responsible, should put the employer on a better basis for a fair study of the laborer's point of view, and might suggest to him the possibility of effort on his part for the improvement of those conditions in a way that would be mutually beneficial.

A study by the laborer of the conditions outside the labor field under which industry must be carried on, the stress of competition, the influence of transportation rates, and the hundred and one other elements entering into successful production would make him broader minded and tend to create in him a fairer state of mind in his judgment of what was due him from the employer.

The necessity for education in the field of industrial conditions is not confined to the manufacturer and his employees. It extends into that other great industrial field known as agricultural pursuits. The value of this study to the farmer I can state in no better terms than those employed by the committee already referred to in its first report to this body.

The study at first hand of industrial conditions as they exist upon the farm, and in the relations of the farmer to those whom he supplies with the products of the farm and who in turn supply him with the things he needs and does not produce, affords opportunity for developing the power of observation and exercising the reason beyond that afforded by a study of what others have written concerning these conditions, and is the necessary preliminary step for effectiveness in the latter form of study, in that it affords in the simplest

and most natural way the apperceptive material necessary for the understanding of the verbal exposition and discussion of industrial conditions.

Such a study paves the way for an understanding of these conditions—of what in them is faulty; how far the farmer is responsible for the faulty conditions; what is essential for their improvement; how far their improvement demands co-operative as well as individual action, the character of that co-operation and individual action, and the means necessary to secure them; how far their improvement demands governmental action, the character of that action, and the steps necessary to bring it about.

While the list of topics for study as here given is long, it is by no means complete, but it is sufficient to show the necessity for such study before investing money in industrial enterprises.

INDUSTRIAL ORGANIZATION

The necessity for education in the field of industrial organization as a universal movement in the industrial world should not be confined to the economist, the money king, or the occasional statesman. Every individual employed in a factory, every holder of stock in that factory has an interest in the results of this movement and will be benefited by any study of it which results in definite knowledge and broader comprehension of the forces which are brought into play and which are controlling it in its development.

But it may well be considered in a more narrow sense. The farmer who tills his own soil, the man in the shop who is his own employer, the proprietor of the small factory as well as the manager of the greatest manufacturing corporation and his subordinates are each concerned with the problems of organization in their special work.

Thousands of farmers today are eking out a scanty subsistence because of a lack of intelligence in the proper organization of the activities of farm life. Thousands of manufacturing establishments are upon the verge of bankruptcy or are reducing dividends for the same reason. Industrial education confined to the production of skilled workmen might prolong the agony but would not avert the final disaster, because of lack of intelligence in the organization of means to ends in the particular productive enterprise. Thousands of firms concerned with the distribution of products fail annually, not because of lack of interest on the part of those who are managing them, but because of lack of skillful organization of the various forces whose action is necessary to success.

The schools do not exist today which undertake to give instruction in these particular fields. Even the body of knowledge which would form the proper field of study has not been organized and put into teachable form. Even the beginnings have hardly been made toward industrial education in this particular field.

ADMINISTRATION OF INDUSTRIAL AFFAIRS

In the field of administration of industrial enterprises, when the organization has been properly effected with reference to industrial conditions, there is the same need for special education. No matter how admirable the organiza-

tion, nor what capital is back of it, intelligent, skillful administration in every department and in every detail is an essential to success. The only place where this can be learned today is in the school of experience, and the bankruptcy courts too often tell the cost of that experience.

Do not think for a moment that this matter of administration is of vital importance in the great corporations alone. It is of importance wherever systematic, economic, orderly procedure is essential to success. It is as essential for the farmer as for the United States Steel Corporation or the Standard Oil Company.

Here again the field of knowledge has not been organized and put into form for instructional purposes; that fact does not lessen its importance but shows the necessity for constructive work by men competent to organize into pedagogic form the materials for instruction in this as in the other fields of industrial education.

INDUSTRIAL PROCESSES

The need of education in industrial processes and the value of this education not only to the producer and his employees, but to the consumer of his products, is written in the course of prices of any single product, in the manufacture of which advantage has been taken of the knowledge of industrial processes due to education in that particular field. And it is written as well in the high cost of production and inferior quality of great quantities of goods, due to lack of skill in processes. The range of educational effort in this field is wide—from that of the humblest worker whose employment demands any sort of skill to that of the scientific expert who employs his knowledge for the discovery of new processes or the improvement of existing processes in industrial production.

The statement of the purpose of industrial education already quoted demands knowledge in all these fields. It demands skill in the application of that knowledge, and it involves general training thru the mental, ethical, and aesthetic development acquired in the organization and use of the knowledge. Industrial education as thus considered is special education for efficiency in special fields, but is general education as well.

PRESENT DEMAND CHIEFLY FOR EDUCATION IN INDUSTRIAL PROCESSES

As I have already said, the chief demand for industrial education at the present time is in the field of industrial processes, whether it be in the mastery of a trade or in the form of skilled labor less comprehensive than a trade in its scope.

There are a number of reasons why the present demand centers upon this one phase of industrial education. It is to this field that most of the efforts for industrial education made either in this country or in other countries have been confined. The passing-away of the old system of apprenticeship has emphasized to the manufacturer the necessity of some other mode of training skilled workmen. The division of labor and the introduction of labor-saving

machinery have in many lines of work apparently obviated the necessity for a systematic and thoro training of the old apprenticeship system when at its best, when four to seven years constituted the period of apprenticeship, and when it was expected that every detail of the trade would be mastered. While it is true that in the modern factory with its multiplicity of machines each doing a limited amount of work, but a short time is required to develop reasonable skill in the operation of a single machine, it has become evident to the manufacturer that for the best results he needs men with greater knowledge and a wider range of skill than are necessary for the mere manipulation of a single piece of machinery.

The rapid advance of Germany and other foreign countries in manufacturing, as shown by the lessening of our exports of manufactured products to those countries and the increase of imported manufactured products from those countries to the United States, has opened the eyes of American producers. They have sought the reason for the marvelous development of manufacturing in those countries, especially in Germany, and have found it not in its great supply of raw material, its water power, and abundant capital, but rather in the system of industrial education that has furnished skilled workmen in increasing numbers and made available the results of scientific research for the improvement of industrial processes. As a result, the manufacturers and business men of all classes who are interested in the industrial welfare of the country and who recognize its value to every class of our citizens are demanding the development of this particular phase of education for this country.

THE EARLY AGE AT WHICH MANY LEAVE SCHOOL UNFITTED FOR ANY
EMPLOYMENT EMPHASIZES THE DEMAND
FOR INDUSTRIAL EDUCATION

The compilation of statistics relating to the period of school attendance by the youth of this country, the study of these statistics and of the result of the limited attendance of so large a proportion of the school population which they disclose, have attracted the attention not only of men engaged in educational work thruout the country but of people generally. The fact that so large a proportion of the boys in the United States are leaving school at or before the completion of an elementary course of instruction, and that the major portion of them are subsequently to earn their living by the work of their hands, that at an early age they seek employment largely in unskilled industries because they are fitted for nothing else and because they are too young to enter upon the work of apprentices even where that is feasible, and that the prospect of emergence from the unskilled to the skilled industries is so small, are all attracting attention to this problem and demanding its solution.

The large number of girls employed in unskilled labor in factory or shop under similar conditions presents practically the same problem tho in a more limited form. People everywhere are coming to recognize that a school

system which confines its efforts in both elementary and secondary phases to the development of mental power thru the study of books, and which offers at best only a limited range of hand training for general culture, is not at all adequate to meet present necessities. The claim frequently made that the only opportunity a boy has in this country to become educated in a trade is to commit some crime for which he is committed to an industrial school, is regarded by some as being a severe arraignment of our present school system, not so much in what we do as in what we leave undone. Statistics show (and common observation emphasizes the showing) that thousands of boys leave school at an early age not thru the pressure of necessity but because the subjects of study and methods of school work do not interest or appeal to them, nor to their parents. They feel and do not hesitate to say that the school is not fitting them to earn a livelihood and that, therefore, they might as well leave at once and become wage-earners even at the lowest rate. It is beside the mark to argue for the value of continued work in the school. The argument does not appeal to them, no matter how true it may be, and it is powerless to hold them in the schools.

This one fact alone, if there were no other, would be a powerful argument for providing facilities for industrial education, at least in the field of processes, for this large class of young people. There is still another argument in the fact that if thru compulsory laws these boys were held in school, a large number of them would fail to secure any large benefit from the school work, and in many instances their presence would be a positive damage to others who might benefit by it, because of their lack of interest or of capacity to master the kind of work the schools offer and of the interference with the work of other pupils in the school resulting from these conditions.

Even the boy who stays in the school until he has completed the secondary course and who then enters the field of industrial effort finds his academic training has not fitted him to enter any of the industrial fields except on the lowest plane. His hand is untrained and his mind is not trained to think in terms of things and constructive processes. His opportunities for employment are limited. He must begin at the bottom and his path of progress is slow at best.

EVOLUTION OF OUR SCHOOL SYSTEM NOT YET COMPLETE

The secondary schools are organized primarily as preparatory schools for the universities and colleges. Even where they have introduced manual training in its best form, the higher institutions give little recognition of that line of work as a preparation for admission to their doors.

The elementary schools are organized with reference to preparing their pupils for the high school. I have no quarrel with these conditions. It may be entirely true that the evolution of our school system has been along the best lines possible when all conditions are taken into consideration. But I protest, and others protest with me, against what is practically an assumption

in many quarters that we have passed to the end of the evolutionary stage and that our educational system has become fixed in type, purpose, and methods. I contend that the process of evolution is not yet complete; that each new type of school providing facilities for education for special lines of efficiency is a phase of the evolutionary development of the system and that the demand for the addition of industrial education in its various forms is a demand for still further evolution in order to meet new demands and to discharge new duties.

STATE SUPPORT OF INDUSTRIAL EDUCATION JUSTIFIED

It is too late to argue that it is no part of the function of the state to provide in its educational system special instruction for vocations or trades or other phases of industrial education. If it be proper, as is generally conceded, that special colleges for instruction in agriculture, in engineering, in medicine, in law, and in other fields may be organized and supported by the state for the direct benefit of the few, it must be conceded that it is proper that other schools should be organized to fit a much larger number of American citizens for efficiency in other lines of special work, even tho they may not be so well paid nor demand so extensive a training or high degree of intellectual power.

PROCESSES REQUIRING SKILL TAUGHT BEST THRU SYSTEMATIC INSTRUCTION

It has been demonstrated not only in this but in other countries and it is apparent to any individual who gives the subject careful consideration, that there is no kind of skilled labor that may not be a subject of special instruction, and that systematic, organized, continuous instruction by competent teachers enables the person being instructed, to acquire the requisite knowledge and skill in less time than is possible under any other conditions.

Some of the greatest manufacturing establishments in this country have recognized that principle by the establishment of definite schools of instruction for their own apprentices—a far different system from the old system of apprenticeship. Such a plan, however, is not feasible except in the largest establishments, but it indicates the possibilities for definite and effective training for efficiency in skilled work of any kind. That the individual thus trained may not know everything of value connected with the exercise of his skill in productive effort; that he has some things to learn thru experience, is no argument against its value, because such instruction far more than compensates for lack of experience in the shop, covering the same period of time thru the better articulation of the various parts of the course of instruction, and thru the wider range of knowledge that should accompany it as a result of the proper organization of the subject-matter for instruction.

THE CASE FOR INDUSTRIAL EDUCATION STATED

The case for industrial education then stands as follows: Physical and mental activities effectively directed to useful and productive ends are a neces-

sity for the majority of mankind. Systematic direction and training are essential for the proper development and control of these activities. For the best results such training must come early in life during the period when the child is properly found in school. Such systematic direction and training are not now adequately given during this period and are not likely to be given in the future outside the school.

It is the right and duty of the state to do whatever is necessary for its preservation. Good citizenship is an essential for the preservation of the state; and one of the essential qualities of good citizenship is that the citizen shall be competent to support himself and those dependent upon him. For the great majority of hand workers in skilled industries, industrial education of proper scope and character will develop this ability. It will transfer from the class of youth who tread the path of idleness, to the class of useful citizens, those who otherwise would quickly and surely pass to the parallel path of crime with its entailment of expense to the public, of public demoralization, and of individual debasement.

FEAR THAT INDUSTRIAL EDUCATION WILL LOWER EDUCATIONAL STANDARDS GROUNDLESS

Among educational men there are some who express the fear that the introduction of industrial education will result in a lowering of educational standards thru the lessening of the culture element, and that it will divert many from the field of general education to this special field and thereby narrow the development of the individual. This is but an echo of the fear expressed whenever the proposition has come for the establishment of any special line of educational work. Those fears have always proved groundless in the past, and this will prove groundless.

We must not forget that industrial education is not for the youth who continue on thru the secondary and higher educational institutions and enter the learned professions. It is chiefly for the thousands who will not so continue, who in any event will get but little, if any, of the so-called higher culture; for the thousands who leave school at too early an age and unfitted for any vocation in life. Whatever of culture may be in the present elementary course of instruction, they have had to the extent that they have mastered that course of instruction. Whenever they leave the school, the cultural value of the course beyond the point where they leave it is of no value to them.

The question is: Shall we offer them school facilities that shall be of greater value to them in directly preparing them to do better work, to fill better positions with increased opportunities for advancement than they would have but for these facilities?

I shall not attempt to define that illusory term "culture" but shall await with interest the exposition of its advocates who shall show that any education fitting one for any useful work is utterly devoid of the culture element.

The great need for the mass of the children of this country today is a longer

period of instruction in school; and common-sense would indicate that the introduction of a phase of education that will appeal to them and to their parents and to the community, and which will ultimately be demanded as a necessity by the employers of labor and by the laborers as well, will be the most potent influence in extending the school life of the child.

For the realization of this end, the child, the parent, the manufacturer, society, and the state have a common interest.

OVERCROWDING OF ELEMENTARY AND SECONDARY COURSES OF STUDY
NO ARGUMENT AGAINST INDUSTRIAL EDUCATION

There are many who claim that the elementary and secondary courses of instruction are now overcrowded and that there is place for nothing more. If we grant for a moment that this statement is true, it has no bearing as affecting the large number of children who have already left the school and who need this industrial education.

That the courses of study are overcrowded is unfortunately true; but that is no proof that they are necessarily overcrowded. The crowding is due to the great mass of non-essentials that have found their way into the school curriculum. The proposition to find a place for industrial education will make it necessary to re-examine these courses, to determine the educational value, not so much of subjects as of phases of subjects and of methods of instruction. Nothing short of some such necessity is likely to bring about this result. The unwillingness to displace anything in the curriculum in order to make place for industrial education is the result of inertia, or lack of appreciation of the idea that there is any other source of stimulus for mental activity than that found between the covers of a book.

INDUSTRIAL EDUCATION: HOW ORGANIZED AND UNDER WHAT
CONDITIONS SECURED IN SPECIAL SCHOOLS

If the necessity for the introduction of industrial education is conceded, the large question yet remains as to how it is to be organized and under what conditions it is to be secured. It will doubtless be claimed that those phases of industrial education concerned with industrial conditions, organization, and administration are not adapted to the elementary school—and to a very large extent this is true. Heretofore whatever has been done in this field has been confined to the university or to the school of experience. It was only a little time ago when what was done in the field of agricultural education was confined to the agricultural college; and yet today we find that a body of knowledge relating to the principles and practice of farming is being organized that is adapted to schools of secondary grade and is even being carried down into the elementary schools. It is entirely feasible to do the same thing to a very large extent with these phases of industrial education. I am not now speaking of what must be done at once, but of what we should look forward to as a thing to be realized as early as possible.

Industrial education, if it is to be valuable for the great mass of youth who

need it, must be offered under conditions that meet local necessities. This will mean in one place the trade school, in another the trade school and shop or factory combined, in another the continuation school at night or during a portion of the day for those already engaged in the industries, and the continuation school will vary in its aims and scope according to the conditions it is to meet. In one place it will be devoted distinctively to the development of skill in trade processes; in another, to a study of the theory underlying the trade processes; in another, to a combination of the two; in a fourth, to dealing with those portions of the general elementary school course of most value to the students attending.

The trade school too will vary in its type. Under one set of conditions it will attempt nothing more than the teaching of processes, in another it will combine with such teaching a teaching of the theory underlying the processes, and in another it will combine with the teaching of the processes general phases of educational work that may be made to appeal to the students as a necessary part of their equipment. Under certain conditions schools must be established, limited in scope to training for special vocations that do not rise to the dignity of trades. In many lines of industry employing youth, the employers will find it to their advantage to organize schools for the training of their employees for efficiency in their particular work. These schools may or may not be of any type previously mentioned.

Of technical schools of the highest type, many are already in existence. Others must be added. Research work of the highest grade of scientific attainment must be encouraged for the development of new industrial processes. Manufacturers in this country must more generally follow the example set by the manufacturers of Germany by the employment of scientific specialists and must furnish them with laboratory equipment for research connected with their special lines of manufacture. Had these manufacturers a knowledge of industrial conditions in the manufacturing establishments in other countries, they would realize, more fully than they do now in most cases, the practical value of a high grade of scientific research in the industrial field.

But when we have provided all these different types of schools devoted chiefly to furnishing facilities for bettering conditions in the manufacturing world, we have only begun the solution of the problem. The same necessity exists in the agricultural world as in the manufacturing world for industrial education; and the conditions under which agriculture is carried on render impossible the establishment of certain types of schools that may be made effective in the production of skilled workmen for the factory. Special schools of agriculture, secondary in type, should be established in every agricultural state in the union and in considerable numbers. Farmers' schools of even a few days' duration, such as are conducted in some of the agricultural colleges of the country, should be a feature of the work in every agricultural college. Such schools would bring the farmers in large numbers into direct contact with the work and workers in such institutions and would be an inspira-

tion and an uplift to them for better things in their own field of effort. The agricultural colleges should extend their work beyond the walls of the institution, not simply by bulletins, but should put men into the field who shall carry the results of the experiment station work to all parts of the state and initiate and direct farm experiments by farmers in the different agricultural districts of the state.

I am aware that there are some who seriously oppose the establishment of special secondary schools of agriculture even tho they themselves have contributed in large measure to the success and usefulness of another special school—the agricultural college. No secondary education in agriculture were possible but for the work of the agricultural college. The secondary school of agriculture, special in its aims and in its course of study, will help to organize into teachable form the matters of knowledge not yet fully organized for secondary work. It will set standards showing the possibilities in this field with boys and girls from the farm. It will be the place to which men in charge of the existing high schools will go to learn what it is best for them to do in organizing the instructional work in agriculture in their schools. They will dignify this kind of education, and, as they multiply, will show the public its value. It will then be easier to find a place in the existing high school, a thing which it does not now easily do.

We must not forget the purpose of the high-school course of study today; we must not forget the atmosphere that permeates it; we must not forget the training of its teachers and the demands upon them by the university and college; we must not forget also that a very small number of children living in the agricultural communities go to the city high school and that even a course in agriculture in such an institution would hardly appeal to any great number of them. It is remote from them, it is a side issue. The student body, in the main, is a body of city youth. The country boy and the country girl are not there in sufficient numbers to create a congenial atmosphere. The high school in the small city or village may have a considerable influx of students from the country, but in the main today, they are those whose faces are turned away from the farm, who are looking to the city as their future home, who are not interested in farming but who are interested in going away from the farm. They are in the high school because they feel that it offers them a training that will enable them to escape from the farm. In time this condition may change, but I believe it will not be in the near future, unless thru the establishment of special schools the whole subject of industrial education for the farmer is dignified and given the place it deserves.

FACILITIES FOR INDUSTRIAL EDUCATION MUST ALSO BE PROVIDED IN
EXISTING ELEMENTARY AND SECONDARY SCHOOLS

I am not claiming that these special schools will furnish facilities entirely adequate, but I do feel that they are the first step; that they will quickest show results that will command the attention not only of the farming population but

of educators as well; and that because of their influence this work may be taken up in such high schools as are favorably located for it and ultimately carried on with great effectiveness, supplementing the work of the special schools of agriculture; and that finally more of this work may be carried into consolidated district schools and into the single-room country school.

The same argument holds for the establishment of special trade and vocational schools, and the same necessity exists (and even to a larger degree) for carrying this work into the existing public schools, both elementary and secondary. The special industrial school will set standards, will show methods best adapted to securing desirable results. But as these schools, in the nature of the case, are not likely to be found for many years outside the larger cities, if the great mass of children in the smaller cities are to have industrial education, it must find a place in the existing schools.

There is a condition existing in the city schools favorable to the introduction of distinct phases of industrial education which does not exist in the country. Manual training is found in hundreds of the smaller cities and in nearly all of the larger cities of the country today.

MANUAL TRAINING MAY BE SO ORGANIZED AS TO HAVE A DISTINCT VALUE FOR INDUSTRIAL EFFICIENCY WITHOUT LOSS OF CULTURAL VALUE

There are people who discriminate very sharply between manual training and industrial education. They tell us that manual training has for its purpose the same general educational value that any work in the traditional course of study has; and it is true that it has been justified and may be justified on those grounds. But manual training, like the general system of education, is in a process of evolution. It is yet unorganized in many localities; it is given but scanty time and meager equipment. The wonder is that under such conditions, it continues to be justified in the minds of the public. There is a distinct tendency today in manual-training circles to modify and enlarge the traditional course in manual training in such way as to make it distinctively industrial in character. To anyone who will study the question with any seriousness, it must be evident that such a modification may be made without in any way impairing its value for training or cultural purposes, while at the same time giving those who take it a training that, so far as it goes, may be a direct and proper beginning for industrial efficiency in some particular trade or vocation.

BASIS FOR REORGANIZATION OF MANUAL-TRAINING COURSES FOR INDUSTRIAL ENDS

In the work of learning a trade there are two stages. During the first stage the learner is concerned with finding out the *what* of each particular process that must be mastered, the *how* in performing, coupled with the performance of the process, under the guidance and control of the attentive mind.

During the second stage the learner is occupied in developing skill in the accurate and rapid performance of each particular process, and in the correla-

tion of these processes to meet the demands of the shop in which he may be employed. This skill is developed thru the repetition of that which, at the beginning of this stage, he could perform reasonably well, when done slowly and with the closest attention to every detail of the doing, continued until the process is performed accurately and rapidly with little mental effort beyond that involved in initiating the motor activity demanded by the process.

In the statement of the scope and character of work demanded in the first stage, it must be observed that there are three steps in the mastery of any one process: (1) The determination of *what* is to be done. (2) The determination of *how* it is to be done. (3) The doing, for the accomplishment of the *what*, thru the application of the *how*.

It must be observed further that the necessary knowledge of the *how*, requisite for the proper performance of a process, may not be acquired in advance of any effort in doing; but the learner must have in mind how he proposes to perform any act he regards as necessary in the process, before he begins the action. The result of the action may show him that the manner in which he attempted the doing was wrong, and that he must revise his conception of the *how*; but always a *how* must precede the doing. The doing modifies the *how*; this modification reacts upon the doing, until the proper standard of correctness is reached.

The first stage is one thru which every learner *must* pass in the mastery of a trade before he can properly enter upon the second stage, during which skill in processes and their use is to be developed, no matter whether the trade is learned in the shop, in the school, or in both school and shop.

This is not the time to discuss the educational principles which determine the place, scope, and character of manual training in the elementary and secondary courses of study for training purposes other than for industrial efficiency; but I venture the assertion that the three steps which characterize the first stage in the mastery of a trade must also characterize every phase of work in a manual-training course which requires an intelligent use of tools and materials in constructive processes, in accordance with sound educational principles. Therefore it follows that the first stage in the mastery of trade processes, in its rudimentary form at least, is found in all manual-training courses based on sound educational principles, and that with proper equipment and competent teaching force, the manual training may be so extended as to complete the work of this stage for a considerable number of trades. The second stage may be completed in the trade school, in the shop, or in both.

Manual training in its earlier stages must of necessity be carried on without any direct reference or relation to the development of skill in any particular vocation. The training which it gives in close observation of an object, to be produced from any given material, of the results of effort in the construction of that object, the determination of wherein the effort has failed, and what must be done thru further effort to remedy the failure, the training of

the hand to execute the mental judgments, furnish a preliminary preparation of high value as a basis for intelligent workmanship which employs the hands later on.

In the later development of manual training, it may be so organized as to bear a very definite relation to certain processes largely employed in the industrial world, and at the same time secure the kind of mental training needed for the proper development of the individual.

In a general way it may be said that the following things are essential for industrial efficiency in the workman:

1. Habits of close observation.
2. A high ideal as to what constitutes honesty in workmanship.
3. Habits of accuracy in work.
4. Comprehension of what is good in design as related to use in connection with the work in hand.
5. Knowledge of materials best adapted to different forms and types of construction.
6. Knowledge of construction processes in the treatment of materials.
7. Skill in the care of tools and in their use in industrial processes.
8. Knowledge of machine processes and skill in using machinery.
9. Skill in freehand and mechanical drawing.

The above statements are general, but specific applications may be made of them so far as they apply to a particular industrial process or trade.

The practical problem for any community in organizing work in manual training in the public schools, so that it may bear the most direct and immediate relation to the industrial efficiency of the boys on leaving school, is to consider: first, the manufacturing industries of the community where skill in operation is required and which are likely to furnish employment for the boys upon their leaving school; and then, to determine the kind of training thru which the boys will make the greatest progress toward skill in the special industry or industries.

In case there are no manufacturing industries in the community in which the school is located, and it is still desired to give training which shall count most largely for industrial efficiency within the particular trades or skilled industries which are likely to prove most attractive to the boys of the community, those trades or industries are to be considered.

When we attempt to organize the manual-training course so that it becomes a direct contribution to industrial education, we have the problem presented of how to make a course which shall meet the needs of the pupil for mental training and for motor training, and at the same time for industrial efficiency. In order that this may be done on a basis fundamentally correct, we must begin with the occupation or trade in which thru industrial education the pupil is to become proficient. We must analyze this occupation or trade and determine what must be known and done in order that proficiency may result. To illustrate: Let us take the house carpenter's occupation, and let our problem be to determine how the course in woodworking in manual training may be so organized as to enable the pupil because of this training to make a very

decided progress, before leaving the public school, toward the mastery of the trade as a skilled workman.

The carpenter must know the qualities and values of materials which adapt them for use in different kinds of construction work; how to select the material, and how to determine the amount and cost of each different kind of material necessary for any particular structure; what construction and assembling processes must be employed and how to perform them, involving a knowledge of the tools which must be employed in these processes and of their use and care; how to interpret plans and specifications and how to make and read detailed working drawings. He must be able to make skillful use of this knowledge.

I have given here only the barest outlines of the different kinds of knowledge necessary for the carpenter. In making the necessary analysis for the purpose I have indicated, each general statement of what must be known must be worked out in detail, and the details must be presented in the order in which they are to be applied to the actual work.

Once this analysis has thus been worked out in detail, we have before us material capable of being utilized in a woodworking course in manual training which shall bear a very close relation to industrial efficiency in the carpenter's occupation. Everything which the carpenter must know and do for the proper performance of his work is here outlined. Such of these things as are within the range of the pupil's understanding and power to master, and which require proper mental activity, may very properly become a part of the manual-training course of instruction and may be presented in the order of their relation and difficulty. It is of as great value when thus definitely organized and related as any other training in woodwork, not so organized and related, and it has the additional advantage of giving the training from which results specific mastery of the tools and processes of the carpenter's occupation, so far as the work may go.

In the manual training course it will stop in the mastery of the trade, somewhere in the first stage, but it will have offered what the apprentice rarely gets—systematic and definite training to a given end so far as it is carried. From that stage on, it will be a question of the development of skill in the performance of a process with which the pupil is already familiar.

Any number of trades may thus be analyzed, and when so analyzed will furnish material, in its simplest form, for instructional purposes. This will have to be done before industrial education, in any type of school, can be organized on the proper basis; and so far as any of these separate elements of knowledge or of doing are within the range of the pupil's capacity and the capacity of the community to make provision for, they may become a part of the manual-training course of instruction.

This problem will vary in different communities, but the mode of solution is the same in every case.

With this modification of the elementary and secondary courses, we should

hold pupils in school longer than we do under existing conditions, and I believe all will agree that with the proper organization of instructional work as to matter and method, the longer the pupil can be kept in the public schools, the better for him.

The present manual-training course may be very greatly modified by widening the range of materials and tools and processes. It should be begun earlier than it is begun in most schools. It should be given more time than is now devoted to it, and more time may be given to it than is now devoted to it in most schools; and more time may be given to it without in any way lowering the effectiveness of the training in the other subjects of the school curriculum. This is not a theory; it has been demonstrated beyond the shadow of a doubt, and what has been proven in a number of school systems under ordinary conditions, may be taken as true for other school systems. It means simply a reorganization of the course of study; the elimination of non-essentials in the common branches; and the better organization of the manual-training work in ways which shall lead out to a number of vocations or trades.

Because this work cannot be carried on in a given locality to the extreme limit that might be desirable, is no reason why it should not be begun. To whatever extent it is given, to that extent it helps the pupil to determine whether he is adapted to a particular line of work or not, gives him the beginnings in that line, encourages him to further effort, and places him at a decided advantage in seeking employment, over the boy who has had none of this work.

INDUSTRIAL EDUCATION FOR GIRLS FOR THE SKILLED INDUSTRIES AND FOR THE HOME

What I have said of the various types of schools adapted to the needs of the boy may in a very large sense be taken as true when the needs of the girl who seeks skilled employment in the industrial field are considered.

But there is still another side to this problem of industrial education that has not been considered. It is that which concerns the education of the girl who sooner or later will assume the responsibilities that will come to her as wife and mother in the home. We shall never solve the industrial problem by considering the boy and the man alone; the girl and the woman must be taken into account. The home is the unit of society; the man is charged with the responsibility of providing the means for its maintenance; the woman is charged with the responsibility for the proper use of what is thus provided for the organization and administration of the affairs of the home. There come to no human being greater responsibilities, none more exacting, none more important, than to the woman in the home. Shall we say that it is necessary for success in the manufacturing establishment that men shall be trained to understand industrial conditions, organization, administration, and processes, but that for the woman in the home no such training is necessary?

Until very recently practically no provision has been made anywhere for the special training of the girl to fit her for her responsibilities later in the

home. The elementary course of instruction, the secondary course, the university course, valuable as each is, important as it may be for purposes of training and culture, gives no special preparation for the practical discharge of her duties. Is special preparation needed for the man who runs a machine in the factory or who tills the soil, and no special preparation needed for the woman who is charged with the responsibility for making the home something more than a lodging-house—instead, a place adapted to its purpose from sanitary, hygienic, economic, and artistic considerations—and who is charged with the rearing of the family, because in their early years it is her influence that is most potent in the guidance and direction of the lives of the children? Is the special knowledge and training necessary for the proper unfolding and development into the pattern of noble manhood and womanhood less important than the special education and training needed for the transforming of a piece of wood into a pattern for a casting? We deem the latter of vital importance. Shall we omit the former?

Hundreds of thousands of dollars have been expended in experiments to determine the proper ration for the cow, the hog, and the horse, and for disseminating this information, because such special knowledge is deemed necessary for the farmer who would succeed in growing stock. Is it any less important that the girl shall be trained to know the food elements in different food stuffs, to know how to select these food stuffs with reference to their economic and food values, to know how to care for them, to prepare them into foods, and to care for and serve those foods, keeping in mind that, like the hog, the horse, and the cow, man is an animal, needing balanced rations for his best development and greatest efficiency?

We spend thousands of dollars to investigate the diseases of chickens and to determine means for checking or preventing these diseases, and for disseminating this knowledge among farmers. We would agree that in the special school for the farmer's boy instruction in poultry raising, diseases of poultry, care of poultry would be a kind of education of the highest value, because it means increased revenue for the poultry farmer. But if special education is needed here, shall we not have it for the girl who, later in the home, is responsible for the feeding of the child? Mortality records in the large cities every year show the death of thousands of children, the causes of which are, by boards of health and physicians, attributed to the ignorance of the mother in the proper feeding of the child.

What matters the industrial efficiency of the man in the home, if there is no industrial efficiency on the part of the woman, if she has no knowledge of values, no special training that will fit her to understand the scientific and economic principles that underlie the administration of home affairs? This lack of special training is a fruitful source of dissension in the home and of the dissolution of the partnership in the home life.

We deem it vitally important to establish textile schools where workers may be trained for skill in the cotton or woollen factory because it means

increased earnings for the operative and increased dividends for the stock holder. If special education is worth while here, shall we deny to the woman the special education that fits her to select these fabrics with reference to their durability and hence their economic value, and with reference to their artistic value as well, which will fit her, when necessary, to shape these fabrics into wearing apparel, or when not necessary to do it herself, to supervise the doing by others who may be employed by her?

We deem it vitally important that the teacher shall have special training to fit her for her work; that she shall study the child and the manner of its mental and physical unfolding in order that she may adapt her instruction to its needs. Is it of less importance that the woman rearing her own child shall have some training that shall at least open up to her the seriousness of the problems of maternity?

Where shall this special instruction be given? Here again special schools adapted to the training of young women for the responsibilities of home life, demonstrating what can be accomplished in this field and the conditions under which it can be accomplished, will pave the way for a much more extensive course in domestic art and science than is now provided in any public school in this country. Here again in many directions, the body of knowledge necessary for such education has not been organized; it must be worked out and it must find a place in the public schools, running parallel with the special lines of industrial education adapted to the needs of the boys.

SUMMARIZATION

To sum up: industrial education must be provided of such kinds and to such extent as shall furnish facilities for those who need it for special instruction and training to fit them for efficiency in the industrial world. The range of this work is from the upper grades of the elementary school, thru the secondary school, in the special school of the elementary and secondary grade, and in the college and university. In rural communities the special class of secondary schools of agriculture will, I believe, provide the means for the necessary special education for the farmer's boy and girl more rapidly than it is possible to do in any other way. In the larger cities special trade, vocational, and continuation schools of varied type must come into existence. But even in the large cities they will not begin to meet the demand for industrial education on the part of the great mass of pupils who are to work with their hands. For these and for the pupils in the smaller cities and villages and in the country, education, less extensive perhaps than in the special school but valuable because of the beginning toward industrial efficiency that it will make possible, must be provided in such public schools.

I have undertaken to sketch in outline what I conceive to be the scope and character of industrial education when it finally comes to have its proper place in our educational system. I am aware that it is not all possible at once, but it is worth while to see the field in its entirety and to proceed wisely in the

development of this work. It will be many years before this scheme in its entirety can be realized; but I believe the American people will be satisfied with nothing less.

THE SCOPE OF THE DEPARTMENT OF WOMEN'S ORGANIZATIONS

LAURA DRAKE GILL, PRESIDENT OF ASSOCIATION OF COLLEGIATE ALUMNAE, WASHINGTON, D. C.

Our president has asked for a brief account of the organization, meaning, and outlook of the newest department in this National Education Association—the Department of Women's Organizations. It was established a little over a year ago, for the purpose of closer co-ordination between various volunteer agencies for improved public schools. It has suffered an irreparable loss in that the woman who conceived the idea passed over to the silent majority just before the organization was authorized. The work has thus fallen to those who must serve without the inspiration of knowing fully its original aim. How well they may be able to interpret Miss Abbott's vision, no one can ever know; how well they may be able to define and establish a wise relation between the volunteer and professional workers in public education, time will reveal.

As I have understood the origin of the idea, it sprang from a helpful combination among the organized women of Connecticut. In order properly to inform the women of that state in regard to school matters which affected their own children, one group studied the conditions of instruction in the schools; another group considered the problem of properly constructed, properly placed, and properly cared-for school buildings; yet another group took up schoolroom decoration and the incentives to a keener patriotic sentiment, etc. This was a true division of labor, based upon the fundamental interests of the various groups; but with it went also a full co-operation in disseminating information about school conditions and in arousing a vigorous public sentiment in favor of progress. The fact that Miss Abbott inspired and marshaled her forces so ably in this state movement gave confidence in her ability to realize her dream of a national co-operation. Her request was made to our general officers in January, 1907, for a new department thru which certain women's organizations engaged in educational studies might gain the needed viewpoint for their work by close affiliation with the organized teachers of the nation.

The department was later authorized at Los Angeles, was organized at Washington in February of 1908, held its first conference at Cleveland last July, and has been feeling cautiously for a sure footing during the past winter.

Let us recall some of the basic rules of this Association and note their effect upon a department whose constituents are derived from other active organizations, and whose activities must be consummated thru these groups. First of all we remember that any professional or volunteer worker in education—man or woman—may join our ranks. Further, any active member of

the Association may vote and hold office in any department. Therefore there is no legal assurance that even the officers of the Department of Women's Organizations shall at any given time be elected from members of the national associations officially named in the description of the department. Yet all active work must be effected thru the various state groups of these organizations; it must be planned, financed, and executed by them. In order to avoid any possible embarrassment until further definition of the department can be reached, it has been deemed wise to recognize as official and formal only the three executive officers who are chosen at the annual meeting. Their duties consist chiefly in providing the section program for this meeting. In this relation they are solely *persons*, active in educational work, and responsible to the general officers of the National Education Association.

But, above this, it was necessary to provide for the active work in the intervals of meetings, which constitutes the sole reason for the existence of the department. To accomplish this end an executive committee was authorized by the department, consisting of one appointee from each of the five recognized organizations. These women are empowered to provide the needed machinery and supervise its operation in producing effective co-operation among their various groups.

In making initial plans, it was at once recognized that the state is the largest unit possible for such co-ordinated work. Two adjoining states will have widely differing laws for education, utterly different urgent needs, as well as varied modes of approaching these needs. Hence a so-called "State Joint Committee" was organized in each state, consisting of five members—one intended to represent each co-operating association. Any vacancy was filled by a member-at-large, who was required to be the unanimous nomination of the existing members of the given state committee, and was formally confirmed in her appointment by the president of the department. This gave an opportunity to appoint several members-at-large who represented strong local interests such as the School Improvement Associations and the United Daughters of the Confederacy in parts of the South.

The only real danger in this method is the chance of having the name of the National Education Association involved in some unwise state activity. This point of danger has been openly acknowledged, and constant warnings have been given for caution in this respect. Some safeguard may be necessary against any possible exploitation of the name of the general association; but since the work is supervised and authorized by the officers of the department, it does not promise any serious difficulty of control.

Twenty-five states have fully organized committees, and twenty-one of these states show definite accomplishment during the brief months of their existence. The specific lines of work are too varied to admit of summary here; but two victories may properly be recorded here because they should be omens of future success. The first great accomplishment is the close of the most difficult initial year, with no case of meddling or friction with school

officers brought to my knowledge. This betokens an intelligent caution which must be the basis of any success. My second cause of rejoicing is in the fact that a marked generosity has prevailed among the co-operating women, showing that they realize that the work has nothing in it for themselves—except the joy and satisfaction that honest work may properly bring.

So much for the biography of the department. Let us now dwell for a moment upon its meaning. Why was it launched into life? Like many another thing, it seems to have had both an occasion and a cause. The occasion was evidently the unwillingness of our general officers to deny a request from a group of women, whose good intent was above question. The occasion may then be passed over with few words and as scant respect. Yet the real cause for the department may be something much deeper and truer and finer than its mere occasion; so do the Fates often work their subtle wisdom thru our blundering impulses. Has not the fulness of time come for the co-ordination in some organic way of the interest of the teacher and the citizen in good public schools? Are we not really regaining a lost point of vantage?

In earlier times the school directors were citizens fully representative of public opinion; the teachers were largely residents of the town, and lived in daily contact with the families whose children they taught; the classes were small, tho numerous; the relation between the home and school phases of a child's life was intimate and continuous. But the same irresistible forces that modified business methods in general, modified our policy of school management. The control of schools became more complex, and was turned over to professional superintendence; the teachers received higher professional equipment, less frequently taught in their home communities, and were consequently less well acquainted with the home conditions of their pupils. In short, every advance in school organization has widened the chasm between the citizen and his school, until the resultant disadvantages are so apparent that he who runs may read. Long since a few sensitive people felt that something was wrong, and tried various good methods of special treatment. The public education, school improvement, and home and school associations are all phases of this effort to re-establish a sympathetic relation between the school patron and the school officer. This sympathetic co-operation is not antagonistic to a highly developed school system. Both things are good and should be insisted upon. What, then, does the department really stand for but this: that a definite, even if somewhat unforeseen, expression has been given to one of the deepest educational movements of the day—the effort to range citizen and teacher side by side in the fight for better citizenship.

But what justifies the introduction of the name of "Women's Organizations" into an Association like this, that makes no sex discrimination in its membership? The reason surely does not arise from the character of the work; that is in no sense peculiarly the province of women. It is but an accident of our American civilization that the only available machinery at the present moment for any wide co-operation is found in the national organi-

zations of women. If the men of America had possessed as well-organized national bodies to execute their educational interests as the women of greater leisure have developed, then we need never have faced the regrettable necessity of seeing a Department of Women's Organizations injected into this Association. Many of us felt at first that we could not stand for such an innovation, even to gain the much-desired end. But necessity knows no law; and the work, if done at all, had to be done by existing agencies. However, let no man hope to evade a conscription to help in the good work; he will be needed, and I doubt not that he will be used, for his full value in wisdom and in political power. It only means that in the America of today the woman citizen has the leisure to plan, create, and operate the social machinery for throwing her own power, and that of her men friends, into a given cause at an opportune moment. Unfortunately her experience does not yet match her leisure and good intent; but this must be earned by hard work and time.

Now what does this opportunity mean to the American woman? It is her entrance upon an apprenticeship in public work that savors of the day of judgment in its solemnity. She may here learn the aims which should actuate her daily relations to the local schools; she may here see her community problems magnified into national proportions; she may here learn from the successes and failures of other workers. She is not here for a separate educational program of her own; but to share your councils, to learn your ambitions, to recognize your unnecessary obstacles, and then to thresh out a kernel of helpful suggestion to guide and stimulate her during the next twelve months of steady work. It is at once a challenge to her intelligence and to her character. The work is new to her; she will many times fail of the best; but, if the signs of the times fail not, she is fated to share increasingly in public duties, and her education to a full comprehension of her new responsibility is the first step to safety, as well as to efficiency.

But success involves even more than intelligence; it calls for high moral qualities—unselfishness, impersonality, and generous recognition of any good work done anywhere by anybody. There can be no monopolies of ideas or of credit for good work in education. Any effort should be prefaced by the modest admission that the best ideas and the greatest successes are more the product of social forces in the environment than of any personal genius. So this opportunity is a new challenge to learn the lesson that women need most of all: to have general, and not personal, ambitions; to look at principles, and not at personalities. If the avowed policy of the department to let no friction exist without being brought into the open; to study its causes frankly; to shame an unworthy ambition into annihilation, and to applaud an unselfish effort openly and cordially can remain, then by intelligence and generosity may the full power of its ambition be employed for good, and no waste be allowed for petty human playing at cross-purposes. To the womanhood of America this may well be counted the greatest public opportunity, as well as the sternest test of power, that has ever opened.

Looking at the reverse side of the shield, what does it mean for the professional teachers? It means a chance to use or to ignore a great, and ever increasing, social force. This force may be used to clear the teacher's path of countless obstacles, and thereby increase his results incalculably. Let me read a few paragraphs from the minutes of one of the state joint committees:

Report of the State Joint Committee. Minutes of the meeting held April 9, 1909.—An invitation was presented from the county examiner for the five members of the committee to attend a meeting of the school directors for the County of——, to be held on May 24, for the purpose of discussing the questions of the consolidation of rural-school districts and the establishment of township high schools. The committee voted to accept the invitation. An invitation was then presented from the president of the State School Improvement Association for the members of the committee to meet with their Advisory Board on May 1. The invitation was accepted. It was decided to postpone outlining the state needs in education until a later meeting, but the following subjects were discussed: (a) the work of the School Improvement Association, which is already well organized; (b) the need of medical inspection; (c) rural-school improvement; (d) how to teach physiology and hygiene so that the pupils will put into practice in the care of themselves what they are taught; (e) how to teach children to respect truthfulness. This is a serious question in the public schools. The committee adjourned to meet on May 1.

One may well ask why these records were chosen for quotation, when it has been stated that twenty-one states can show genuine accomplishment. Because this brief half-page from the minutes of a state which is classified as "organized, but not yet at work" exemplifies almost every essential principle in my ideal for this volunteer work. It shows the school authorities ready to inform and use the interested citizens; it shows the chief existing volunteer association of the state welcoming to its directors' meeting our five newly appointed women; it shows a ready recognition by these women of the good work already being done by other agencies; it shows caution, and a determination to reserve action until it can be based upon a fair amount of knowledge; it shows wisdom in choosing for discussion the subjects in which the home *must* back the school—health, character, better school equipment; these are not domains in which teachers need fear any meddling. In these lines every small shred of assistance may be fully and fearlessly welcomed without chance of future complications.

Do we wish to work out such a co-operation as this report suggests? Next to the press, the organized women are often counted the greatest force in the country for the creation of public sentiment. In many cities the leading papers give generous space to women's public interests, and thus the two forces may even be combined. Undoubtedly many a city superintendent will bear willing testimony to the fact that he can today, as never before, call upon the busiest and ablest citizens for serious consideration of his school problems. What is true of our business men is even more true of our women. They have larger leisure and fresher enthusiasm, altho less business training. Can a training be given them that will make their leisure a valuable contribution to the community welfare? One way to begin to do it is to get as many of them

as possible to share in these educational conferences, and thereby learn what the teachers are trying to attain for their children.

What better backing can a good superintendent have than this for a campaign of enlightenment in support of good laws, either in their passage or in their enforcement? What readier machinery for a "long pull and a strong pull, and a pull altogether" in aid of any educational need of his state?

This youngest child of the association is already here in our midst. It is of somewhat unusual proportions, representing about 900,000 organized women at its birth. It is no innocent plaything; it represents tremendous undeveloped forces for good or ill. Now what shall we do with it? We can do any one of just the same three things which can be done with any living child. It can be killed, if one dares to destroy so much promise of power. This method has the sole merit of eliminating all future risks. It can be allowed to run wild, to be moved by caprice or self-seeking—an unreckonable danger to the association and to society. Best of all it can be educated to serve intelligently and devotedly the great human interests for which this association so ably stands. It may never become the most comfortable department of this Association, but I dare prophesy that it may easily be made the most valuable single department that we have, if we can face the task of training it to its purpose.

This, then, is my estimate of the new child in the family. It was probably less welcome to me sixteen months ago than to anyone else in our active membership. I have watched it grow thru the intervening months, and frankly admit today that—while I still tremble for its future—I believe it bears a promise too precious to American womanhood and to American childhood for us to begrudge it our patient service.

THE CALL TO CITIZENSHIP

NICHOLAS MURRAY BUTLER, PRESIDENT OF COLUMBIA UNIVERSITY
NEW YORK, N. Y.

Fourteen years ago this Association met for the first time in the city of Denver. It was then my privilege to address the members of the Association as their president, and I chose as my subject a question which was then, and perhaps is still, perplexing the minds of thoughtful teachers everywhere—What Knowledge Is of Most Worth? In answer to that far-reaching query I attempted to point out where, in my judgment, standards were to be found with which to make sure test of the relative worth of the knowledges which compete for the attention and the patronage of intelligent men.

Tonight, at the kindly instance of the distinguished gentleman who occupies the chair, I am again permitted to address this great Association, as broad in its sympathies as in its scope, assembled once more in the city of Denver. In the interval much has happened. Many familiar faces have dropped from our ranks, and their spirits have passed over to the shores of the undiscovered

country. Education has everywhere advanced with giant strides. Schools of every kind have multiplied and important new educational agencies have come into existence. The College Entrance Examination Board and the Carnegie Foundation for the Advancement of Teaching have demonstrated their capacity and effectiveness as standardizing agencies for institutions of secondary and higher education. Vexed problems of the program of studies have advanced toward solution. Some dogmas eagerly taught fourteen years ago have lost their power, and new centers of educational interest have been developed. Our nation as a whole has passed thru important and quite unexpected developments. Economic distress and economic prosperity have trod upon each other's heels with startling suddenness. A new political generation has come upon the scene, and it finds itself confronted by new and unfamiliar problems. Strong, virile personalities have contended together in the political arena for public favor and support, while the whole world has looked on. The war with Spain, which fourteen years ago was unthought of, has passed into history, and as its result, peoples and lands at once distant and dependent have been brought under American rule. The phenomenal growth of industry, transportation, and commerce has put a new face upon many old questions, and has proposed some new ones as well. For these reasons alone, without pausing to add others which at once suggest themselves, the burden of responsibility resting upon American citizenship is today greater than it has been at any earlier time.

Several imposing political antinomies confront us. The natural desire to develop foreign commerce, and to enrich our people thereby, finds itself face to face with the determined purpose to throw the protecting arm of government about domestic industry. The definite wish to attract to our shores the ambitious and the worthy from all the world is held in check by the stubborn weight of the race problem, the roots of which are deep down in the nature of man. The purpose to keep open to every individual all possible avenues of usefulness, and all possible opportunities for lawful acquisition, is opposed by the determination not to permit the development under law of great organizations, powerful enough to bend the law to their own purpose and to control the state itself. If fourteen years ago it was natural to discuss the principles which determine educational values, tonight it is equally natural to discuss the principles which underlie and control good citizenship.

The American citizen at the beginning of the twentieth century has something more to do than to face, and if possible to solve, these contemporary problems, complicated and difficult as they are. He has also, and first of all, to preserve and protect those underlying principles of civil and political liberty which were established by the fathers, and which have been handed down to him as the basis on which the whole fabric of this Republic rests. To fail to solve the problems of today would certainly damage, and perhaps destroy, the fundamental principles of Anglo-Saxon institutions. On the other hand, to solve those problems in ways that antagonize and contradict the great

insights of the past two thousand years, which insights have crystallized into forms of liberty and modes of government as familiar and as necessary as the air we breathe, would be not to solve them at all, but only to postpone and to complicate their possible solution.

It is plain, then, that the educational instrumentalities of the country, schools, colleges, and universities alike, have before them here a task which takes precedence of all questions of school organization and management, of programs of study and curriculum, of teachers' salaries and tenure of office, of general *versus* vocational training, of secondary and ancillary questions of every sort—the task, namely, of preparing intelligent American citizens to take up each his own share of the nation's responsibilities.

The unrest which is abroad in the world, and which is found alike in Europe and in America, in the unchanging East as well as in the restless and rapidly moving West, is in no small part due to the lack of understanding of what is going on in the world and what has gone on hitherto. What one does not understand first perplexes, then annoys, and finally antagonizes him. It is not true, as some hold, that the world's unrest is traceable in last analysis to physical hunger. Probably there never were so few hungry men as there are today. Civilization may have its faults, but lack of ability to uplift the masses of the population and to offer them opportunity is not one of them. The world has been for more than a hundred years under the spell of abstract principles, admirable in themselves, and yet the world in large measure lacks the ability or the capacity so to organize itself and its business that those principles shall find just and equable expression. Everywhere old beliefs, old traditions, and old customs are giving way before the corroding tooth of time, and as the time-honored creeds—political, social, and religious—lose their hold, others equally controlling and imperative do not come forward to take their place. Immense masses of men are left, therefore, with almost boundless opportunities for good or evil, but without guiding principles with which to work. This leads to intellectual, political, and moral restlessness.

There are many who feel that the rising generation of Americans is growing up without any proper knowledge of the fundamental principles of American institutions and American government. Because of this lack of knowledge, well-meaning men lend ear quite too readily to demagogues who propose to them all sorts of schemes without any relation, save one of antagonism, to establish political principles. From listening to demagogues, it is but a short and easy step to a state of mind in which envy, greed, and hate are elevated to the lofty place which should be occupied by respect and confidence, as well as by political insight, political knowledge, and political experience. The Americans of an earlier day got their training in the fundamental principles of citizenship from the stern facts which faced them. This was the school in which the nation's fathers were educated. During the early part of the nineteenth century the task of nation-building went on apace, and the discussion of fundamental principles was always to the fore in the Congress as well as before the people.

Then came the great clash of arms in civil war, and principles were yet turned to for guidance and direction. Men sought even to stay and to turn back the tide of battle with the force of logic.

Today, however, one hears much less of these fundamental principles. There are those among us, some of them in places of responsibility and great influence, who call them outworn, antiquated, obstacles to popular government, and who would substitute the passing desire of today for the carefully wrought design of all time. Men now talk with straight faces of substituting rude and primitive justice for the orderly procedure of law, apparently with no recognition of the fact that this substitution means to plunge man and his highest interests back into barbarism, and to re-establish the time when might made right. The courts are attacked as usurpers of an authority which the people themselves have given them for the people's own protection. The carefully built guards which have been put about individual rights and liberties are denounced as fortresses of privilege by those who seek privileges for themselves at the expense of the rights of others.

There are only two really deep-seated and influential enemies of human happiness and human order, ignorance and selfishness. These do pretty much all the damage that is done in the world, and they are the always-present obstacles to improving the condition of mankind. It is the province of intellectual education to address itself to the first of these, and it is the task of moral education to deal with the other. If men's eyes could only be really opened to an understanding of how the civilization of the world has been won; if they could be brought to see the significance of each step taken, however long ago, on the upward path of man's development; if they could recognize that the perplexities of today are due chiefly, if not entirely, to lack of adjustment between the ruling principles which are at work in human life and the circumstances of the moment, and not to the imperfection or unwisdom of those principles, they would be able to pass juster and wiser judgment upon the questions submitted for arbitrament to them as citizens. If men could only be led to appreciate the distinction between selfishness and selfhood; to see the richness and fullness of nature which come from service; and to realize that the highest expression and the greatest conquest which a human personality can attain is thru finding its ideals and its satisfactions in promoting the happiness and the interests of its kind, the task of government would be easy indeed.

In all parts of the world there are those who feel this so strongly that, in order to gain what seems to them to be a desirable end for the whole body politic, they would strike at the roots of human individuality and deprive it of the favoring soil in which alone it can grow. If they were to succeed in this endeavor, they would not mend matters at all. On the contrary, they would make them worse. It is not less individuality that we need, but fewer self-centered individuals. It is not less private property that we need, but private property more widely distributed and fewer men who treat their hoards as

misers rather than as trustees. Human individuality and personality will blossom anew and more richly if planted in the garden of service.

If one, seeking to know the story of civilization, casts his eye back over the pages of recorded history, he will find that the record of progress can be written in a single sentence. It is the development of liberty under law. Liberty and law are the two words upon whose true and faithful exposition all training for citizenship must rest. He who truly understands the meaning of liberty and the meaning of law, and the relation of one to the other, is ready to face his full duty as an American citizen.

It is a sorry travesty upon the serious business of training for citizenship, that it should be thought that we can make citizens by teaching the external facts relating to the machinery of government alone. A knowledge of how government works in this and other lands is highly important and of course helpful. But this knowledge may be minute and complete and yet be unaccompanied with any real grip on the principles that vitalize free government everywhere.

An admirable book for training in the fundamentals of citizenship could be written in three parts: the first to deal with, to describe, and to illustrate the conception of Liberty; the second, to deal with, to describe, and to illustrate the conception of Law; and the third, to outline in simple fashion the agencies which the American people have created in order that Liberty and Law may strengthen each other.

Liberty is the freedom from all restraints but those which the lawful rights of others impose. Liberty, therefore, attaches to man as a social and political animal. It relates to his conduct and opportunities as a member of a body politic. Liberty contradicts and denies license just as completely as it contradicts and denies tyranny. To escape from restraints other than those imposed by the lawful rights of others, men have made every conceivable sacrifice. To be permitted to hold opinions of one's own choosing, to pursue the calling of one's own preference, to move about as inclination and opportunity may lead, to retain as one's own possession the rewards of one's labor and skill, are inseparable from liberty. The free man, therefore, lives surrounded by both opportunities and limitations. The opportunities are an invitation to the exercise of his own capacities; the limitations are the just opportunities and privileges of others. It is one of the paradoxes and marvels of human nature that man grows in power and in grace as he lives and works with others who have the same privileges and opportunities as himself. As he rises superior to these limitations and thru sacrifice overcomes them and turns them into elements of strength and power for himself, he grows in individuality and in usefulness as a citizen.

It is law which imposes the limitations that are characteristic of liberty. Law is nothing more or less than the system or collection of principles and rules of human government in their application to property and conduct, which are enforced by a sovereign political authority. Laws themselves

change but the principles underlying the existence of law do not, and cannot, change unless society and civilization are to be destroyed. They are the long and painful product of evolution operating in the field of human conduct and human affairs. The really intelligent man regards the tried and tested products of time with high respect; the anarchist would destroy them at one blow for the pleasure of returning to chaos. It is of high importance to teach that law is not caprice, that it is not tyranny, that it is not limited in its application. It is the sovereign people themselves who speak by the mouthpiece of the law, and the institutions and agencies which have been created for the exposition and enforcement of law are the people's own institutions and agencies. It is a noteworthy and singular characteristic of our American government that the Constitution provides a means for protecting individual liberty from invasion by the powers of government itself, as well as from invasion by others more powerful and less scrupulous than ourselves. The principles underlying our civil and political liberty are indelibly written into the Constitution of the United States, and the nation's courts are instituted for their protection. We Americans are thus in possession of an apparatus unlike anything which exists elsewhere in the world to protect the principles of liberty, and it is to this more than to any other single cause that we owe the stupendous strides of the past one hundred and twenty-five years.

An intelligent citizenship, which is also good citizenship, implies, however, much more than a knowledge of fundamental principles, indispensable as that knowledge is. Good citizenship implies a habit of will by which the individual instinctively conforms his action in concrete cases to the abstract principles in which he professes belief. It is curious how many men feel that the rule of sound principle is excellent for the conduct of others, but that it should be suspended or at least relaxed in their own case when some material advantage is to be had. It is a long time since clever men first began to devise ways and means of making the worse appear the better reason, and human ingenuity has not yet exhausted itself by any means. Madame Roland's heart-breaking cry from the scaffold, "O! Liberty, how many crimes are committed in thy name," is still ringing in the world's ears. We must be careful, then, not to confuse the names Liberty and Law with the facts. We must not permit ourselves to be misled by appearances, but rather insist upon digging down to the bedrock of underlying principle in order to determine our attitude toward a specific political or social problem.

It is curious, too, how ready men are to condemn in their contemporaries the qualities which they profess most to admire in their ancestors. What was the determined purpose of long ago becomes narrow-mindedness and stubbornness when exhibited today. The lofty idealism of some great prophet of the race, which has been celebrated in song and story for centuries, passes into the vagaries of a dreamer and the outgivings of an unpractical mind, when we find it looking us in the face. This power of self-deception keeps many of the worst citizens from realizing that they fall short of perfection in any degree.

They go thru all the forms and recite all the formulas of the creed of respectability and of duty. They dole out a little something to charity now and then, with quite the air of a martyr going to the stake for his beliefs. What more can be asked of them? The answer is instant and imperative: Make some show of genuine human feeling. Give some expression of honest human sympathy. Offer some real sacrifice for the common interest and the common good. Dwell upon something other than one's own physical comfort and material welfare, and lend a hearty hand to the huge task of making more human beings intelligent, property-holding, and free from the harassing and in large part unnecessary cares which now torment them. If the decent men and women of America would begin tomorrow to do the things which their private beliefs and their public professions require, the sum-total of the world's comfort and happiness would be marvelously increased before sunset. It cannot too often be repeated that the problem of human betterment is not a problem of revolution. It is not a problem whose solution involves cutting loose from all that has gone before, or one which compels radical readjustment of accustomed legislation. It is simply and solely a matter of individual self-betterment. Individual men and women are not going to be made over by the spread of some philosophy as to how under other auspices or in other worlds than ours the race might have been happier and more comfortable. Society as a whole is nothing more or less than the sum-total of the individuals who compose it. It has no separate metaphysical entity, nor is it some strange and alien thing of which individual citizens know nothing and form no part. Individual men and women are society. They are the state. To it their highest allegiance is due. No church, no party, no union, no lodge, may interpose its interest or its ties between the state and the highest duty of the citizen with impunity, or without tending to overthrow the social order and to substitute the hatefulness of class feeling for the glory of patriotism. If men's standards of action be raised, if their citizenship be real, sincere, and vital, then society is already reformed. Nothing else remains to be done.

In one of his well-known essays, Macaulay makes the statement that no compositions have ever been produced in the world that are equally perfect in their kind with the great Athenian orations. He adds the striking suggestion that genius is subject to the same laws which regulate the production of cotton and molasses. The supply adjusts itself to the demand. The quantity may be diminished by restrictions and multiplied by bounties. To the influence which oratory exerted at Athens, Macaulay attributes the singular excellence to which eloquence attained there. Why should not good citizenship rise to heights here in America equal to those which oratory and eloquence occupied at Athens? Macaulay may be right. Let us put a bounty on good citizenship by giving to it great influence; by rendering it high honor; and by holding it in incomparable esteem. Let these standards be set early in the home and in the school. Teach young children who the real heroes of our Republic are. Show them with clear illumination the underlying principles on which

the nation is built, and tell the story of how mankind discovered those principles and wrought them into political institutions. Do not permit the problems of today to become separated from the problems and principles of yesterday. Make it plain that the story of our political evolution is continuous and that what exists and perplexes now is the natural and necessary product of all that has gone before, and will, in turn, condition and determine what is to follow after. Before all else, keep the inspiring maxim, Liberty under law, before every American child, and as he grows in power of appreciation see that he understands what it means and involves.

The *Institutes* of Justinian, which have shaped the law of Europe for nearly fifteen hundred years, open in sonorous Latin with the sentence which rendered into our tongue reads, "Justice is the constant and perpetual wish to render everyone his due." Justice, then, is a habit of will; a habit of will not on the part of an individual sovereign, or of a high officer sitting in state, but a habit of will on the part of every individual who claims and receives the rights and privileges of a citizen. The will to render everyone his due means that the rich, the powerful, and the successful are to have their due accorded to them without grudging and without envy, just as the poor, the unimportant, and the struggling are to have their due in fullest measure without oppression or exploitation. It is easy to be just when it costs nothing. The test of one's essential justice of mind and will comes when personal interest, personal prejudice, or personal passion stands in the way of its exercise. The perpetuation of democracy depends upon the existence in the people of that habit of will which is justice. Liberty under law is the process for attaining justice which has thus far been most successful among civilized men. The call to citizenship is a call to the exercise of liberty under law; a call to the limitation of liberty by law; and a call to the pursuit of justice, not only for one's self, but for others.

For inspiration to an understanding of American citizenship let teacher and student alike turn to the great oration of Daniel Webster delivered at Plymouth, Massachusetts, on December 22, 1820, to commemorate the first settlement of New England. The reader who follows this remarkable exposition of the meaning of republican institutions as Americans had framed them will understand the feeling of John Adams when he wrote: "This oration will be read five hundred years hence with as much rapture as it was heard. It ought to be read at the end of every century, and indeed at the end of every year, for ever and ever."

Those glowing words are the judgment of one of the nation's fathers upon the meaning of the call to American citizenship. What is to be the judgment of those who are now the nation's children?

ETHICS IN CIVIC LIFE

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I invite you to a consideration of a trite but important subject, Ethics in Civic Life; or, The Obligations of Citizenship. Civic life relates to home and society and business and church and state, and out of those relationships grow the many and complex obligations of citizenship. Personal relationship always carries obligation, moral or legal.

Every government—civic, social, or religious—is founded upon the principles of human duty; and no civil government can be administered successfully unless there is harmony of relationship between the character of its institutions and the ethical standards of its members. As governments vary in plan and development, so will relationships and standards. Successful monarchy is possible under moral standards quite different from those which are essential in efficient democracy. Barbarism and civilization have few ideals in common.

As citizens, our relationships, responsibilities, and standards are peculiar to our form of government and to the age in which we live. What are the relations of democratic citizenship? What are the resultant obligations? What are the essential standards? Do we realize those relations; appreciate those obligations; live up to those standards?

SOME CIVIC RELATIONS

The home—source and nursery of every civic and social virtue—grows out of the marriage relation, and the first and most lasting obligations originate there. The relations of child to parent, of parent to child, of child to child, and of parent to parent, are natural, and from them spring sweet and sacred obligations, which cannot be disregarded without a pollution of the wellsprings of life. With fidelity, patience, and pleasure should those obligations be borne.

The relations and obligations arising in everyday life are great and numerous, and are ever increasing in magnitude and numbers. Among such relations may be mentioned those of rich to poor, of employer to employee, of seller to purchaser, of lender to borrower, of educated to ignorant, of old to young, of neighbor to neighbor—all of which also exist conversely, and impose duties at once weighty and difficult of performance.

Since government has to do with the regulation of everyday affairs, practically all of the relations mentioned are civic as well as social. Some that are peculiar to government are those which exist between ruler and ruled, law-abiding and criminal, government and individual, citizen and citizen.

LOW ETHICAL STANDARDS

These are some of the relations belonging to civic life. Are we as individuals and as a people meeting the obligations which they impose—meeting

them honestly, fearlessly, successfully? Permit me to call attention to some conditions and tendencies that indicate a negative answer—to some of the results that have arisen from too general a yielding to low ideals. It becomes necessary sometimes to expose the dark in order to produce the bright side.

In all the fields of human activity the evils of unrestrained selfishness, the natural and inevitable results of low ethical standards, are manifesting themselves, and are influencing unfavorably all business, social, and governmental life—yes, even religious life itself. Old theories, old practices, old conceptions of honesty, virtue, and fair dealing are being revolutionized.

In the domain of business, success at any price is coming to be the motto. That which is not specifically prohibited by statute is regarded as permissible. Take every advantage under the law; if possible, evade the law; if necessary, violate the law—this is the practice in the get-rich-quick business world, and has resulted in the marvelously rapid accumulation of colossal fortunes, which stand as a menace to democratic institutions, and threaten to shatter democratic ideals.

Paradoxical as it may seem, this disregard for moral obligations, this excess of liberty, this deformed sense of duty in business relations, is being organized to the end that unethical and illegal combination is lessening the field for independent individual effort, and merciless monopoly is feeding and growing fat upon legitimate personal endeavor.

In social life, modern standards threaten to undermine the basis of right living, and stress is placed upon the follies and frivolities of life, rather than upon those things that are elevating and ennobling.

Money is being made the chief qualification for high social standing; gold is valued above brains; ill-gotten wealth above nobility of character. Marriage is laughed at; its sacred vows are made to be broken; and the divorce evil threatens to make of the home a veritable pandemonium.

An alarmingly large number of people act as if they were created only to eat, sleep, breathe, glitter, and pass away—as if it were all of life to live and all of death to die.

Government, too, is jeopardized. Intoxicated by certain phases of material prosperity, maddened by the allurements of territorial acquisition, frenzied by phenomenal success at arms, we are drifting into a policy of subjugation and colonial expansion, imperialistic in tendency and vastly costly in maintenance, which is causing observant, patriotic, thinking people to regard the country's future with deepest solicitude. With misgivings should we contemplate the carrying of the flag where the constitution does not follow, for the flag and the constitution should be one and inseparable, now and forever.

There is developing that centralization of governmental power which, with its natural concomitant, political corruption, if not checked, will devour with insatiate greed the civic rights of the people. The policy of protection for protection's sake presents its seductive form, and there come forth palaces, riches, power, pomp, and splendor for the few; huts, poverty, wretchedness,

misery, and ruin for the many. Justice, equal and exact justice, pleads for a departure from this unethical and oppressive policy.

There is felt frequently the shock of conflict between labor and capital which, but for wrong-doing upon the part of the one or the other, would be friendly coworkers. At times, the world stands appalled at the fierceness of these conflicts, and sometimes the very foundations of government are made to tremble in their places.

As a consequence of man's failure, in past ages, to appreciate fully the rights of his fellow-man, we are confronted today with the race problem—a menace to government, an obstacle to advancement, a hindrance to learning, and the standing adversary to sectional reconciliation. From the porticoes of high heaven angels of peace and love watch with fear and trembling the process of the solution of this most perplexing problem.

SPIRIT OF LAWLESSNESS

As a result of the failure to maintain high ethical standards, the spirit of lawlessness is prevalent. Disregard for law, man-made and God-given, is widespread. Everywhere we have excess of liberty, unbridled license, barbaric lawlessness; and lax enforcement is the bane of both state and nation.

The frequency, the recklessness, and the impunity with which laws are violated should bring fear and shame to every patriotic citizen. In no other civilized country is law-breaking regarded with so little concern. If the offender be wealthy or influential, acquittal or light punishment is practically certain. If he be poor and without family influence, conviction is the usual result. Impartial and adequate justice is seldom administered. What a sad commentary on our boasted civilization!

One of the most alarming features in which the spirit of lawlessness manifests itself is that of mob violence. At first, appeals to mob rule were infrequent; now they are frequent. Then, only negroes and uninfluential whites were the victims; now, people of character and standing, without regard to race or class, are sometimes executed. The lawless spirit, whether it manifests itself in the "Night Riders," the "White Cappers," the race riot, the "Black Hand," the "boycott," the financial conspiracy, or other form is no respecter of persons or institutions.

When these conditions are contemplated, one is constrained to wonder if the court is to be superseded by the mob; if self-government is to prove a failure; if the result is to be complete anarchy—a drifting-back into the darkness of barbarism.

MORAL TRAINING NECESSARY

What is the remedy? How can we attain to new and better conditions? Only thru the processes of education. In no other way can proper ethical standards be established and maintained; by no other means can a people be advanced in civilization, and prepared for the highest forms of self-government. Thru the development of mind and heart, the masses must be brought to a

realization of the fact that violation of the law, civic or moral, degrades all who participate or condone; that crime is not a preventive but a producer of crime; that lawlessness begets lawlessness; that hatred and revenge breed hatred and revenge.

Public officials must be trained to realize that public office is a sacred trust, and that yielding to the lawless element is inexcusable. The children of the land must be taught to obey the golden rule; must be made to appreciate the meaning of the command, "Thou shalt not." Along with mental and physical training must go moral culture. "Thou shalt not lie," "Thou shalt not steal," "Thou shalt not kill," and all the other "thou-shalt-nots" must be inculcated so systematically, so persistently, so effectively, that proper regard for the rights of others shall become a fixed principle in the life of every man, woman, and child.

The lawless rich and the lawless poor must be placed upon the same plane in the administration of justice. To that end, preparation for citizenship should begin in infancy and continue thru life.

PLACE FOR TRAINING

This training should begin in the home, for nowhere else can the lessons of love, truth, obedience, honesty, and fidelity be so effectively inculcated. There should be implanted that nobility of character, that love of right for the right's sake, that stalwart patriotism, and that unfaltering courage so necessary in governments where the people rule. But, sad to say, the home is failing in this important duty. The obligations of fatherhood and motherhood are neglected in the race for wealth and pleasure. The undisciplined child grows into the lawless citizen; and the lawless citizen is the liar, the swindler, the thief, the grafter, the robber, the lyncher, the murderer.

Can this training be given by the church? Is the church giving it? While I have an abiding faith in the efficacy of the work of the church, there seems to be little hope for speedy and adequate relief from that source.

What about the press? While the press is a great educator and is powerful in advocacy of the supreme importance of civic righteousness, it does not reach adequately the citizen at the most impressionable age.

HOPE IN PUBLIC SCHOOL

It is clear that, for a development of ethical standards which will lead to a proper appreciation of the relations and obligations of civic life, we must look to something other than the agencies mentioned. To what source shall we look?

It is to the school, especially the public school, we must look. Upon the teacher in the school must we rely; for it is the teacher's privilege to erect high ideals and build up to their full stature, to apply correct thinking and noble acting to the solution of life's problems, to direct and preserve the republic. Knowledge is power, and an educated conscience is its only safe guide.

To the end that the teacher's work may be most effective, every child should be required by law to attend school an adequate length of time in every year. If it is the duty of the state to provide schools, equally is it the state's duty to require its children to attend them. Shall the state sacrifice the citizen and endanger its own stability and efficiency by permitting children, thru the neglect or cupidity of unnatural parents, or thru the avarice and inhumanity of grasping corporations, to grow into manhood and womanhood dwarfed in body, mind, and soul? Such a policy is nothing less than social and governmental suicide.

NEED OF NATIONAL AID

While each of the states recognizes the necessity for universal education at public expense, while each is striving to meet its obligations in that respect, and while each is making commendable progress under existing conditions, the task is only begun. Indeed, students of education and economics are coming to realize that the task of providing adequate educational facilities for all of the people is beyond the power of some of the states; especially is this true of the section from which I am come.

If the South were as wealthy and productive as other sections of equal area and density of population, which is not true by reason of the ravages of war and the presence of the negro, it would require double the rate of taxation to give educational advantages to her children equal to those provided by other sections for theirs, because the South is confronted with the necessity of maintaining a dual system of schools. To provide equal advantages under existing conditions would require a rate of taxation many times larger than that levied elsewhere. Such a rate would be oppressive, impoverishing, confiscatory, and practically the whole of the burden would have to be borne by about one-half of the population.

Then what is to be done? This, and nothing less than this: the national government must come to the rescue. Congress must make an adequate annual appropriation for purposes of general education, to be apportioned among the states of the Union upon the basis of illiteracy, and to be expended by the states thru the channels already established. Such apportionment would place most of the appropriation where it is most needed and would accomplish most good.

The educational problem peculiar to the South was created by the national government, and that government is in duty bound to assume its share of the work of solving that problem. To create a burden, and then neglect or refuse to assist in bearing that burden, is unfair; and, if deliberately done, is not only unfair, but absolutely wrong and criminal. This is true of individuals—it is equally true of governments. How long—oh, how long—will it require for the nation to awake to a sense of its duty to that section and that people!

If the continued inaction of the national government renders it necessary

for one or both of the races there to receive meager educational advantages, it is best for all concerned that, for a season, the advantage should go to the dominant race. Why? Because the best way to secure universal education for the negro is to give universal education to the white man. The more you educate people in the right way, the more willing and eager do they become to give education to others. Educate the white man properly and the white man will educate the negro. Of course it is desirable and necessary, where possible, that the education of the races should proceed under conditions equally advantageous.

CONCLUSION

As a means, then, of raising the standard of ethics in civic life, I would urge for everybody education of the right kind—education of body, mind, and conscience, with special emphasis upon the last mentioned. To that end, I would have individuals and states to exert themselves to the utmost. To that end also, I would have the nation to perform its long-neglected duty.

In conclusion, I would not have you believe me to be a confirmed pessimist in my views as to the country's future, for I am not. Beyond the storm-clouds I see sunshine. The American spirit has never yielded to complete and continued retrogression. Great crises are necessary for the development of that which is best in a people.

Adequate leadership has never failed to materialize when the country's safety has been imperiled. Such leadership is now in preparation. Already a general awakening of the public conscience is noticeable. We will meet and solve every perplexing problem, and in that great work the teacher will perform not the least important part.

EDUCATION AND THE PETITION TO THE THIRD HAGUE CONFERENCE

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Elihu Root, who has rightly been called the great peace Secretary of State, has recently said:

The true work of promoting peace is not so much a matter of diplomacy as it is a matter of education. The great obstacle to the peaceful settlement of most international disputes is to be found in popular intolerance of concession. . . . When the people of the civilized countries have been educated up to the spirit of fairness and just consideration for the rights of others, . . . the danger of war will be, in a large measure, ended.

I believe we all agree that Mr. Root is right. Public opinion has never before so largely determined the trend of events thruout the civilized world. It holds dominating sway whether in the town, the city, the state, the nation, or the world, and the public opinion of the next generation, on the entire group of questions involving international friendship and good-will, must to a very large extent be the outcome of school influences.

But in trying to shape public sentiment, we need not confine our efforts

to the young. Much has been done, much can be done by appealing to the nobler feelings of thinking men and women. By signing the petition which we are now to consider, and by inducing others to sign it, we can bring into action a force that will powerfully affect the world for good.

To explain the significance of this petition, allow me briefly to refer to a few of the most important achievements of the two Hague Conferences.

The First Hague Conference, that of 1899, brought about two striking results: (1) It framed the great convention for the peaceful adjustment of international controversies; and (2) it established the permanent Hague Tribunal, from which a body of arbitrators may at any time be selected to pass upon any specific dispute between two countries. This tribunal has already rendered a noteworthy service to the world. It has adjusted four international difficulties, and our own country and England will soon refer to its decision the age-worn dispute about the Newfoundland fisheries.

The Second Hague Conference, of 1907, made a long stride forward in the cause of international brotherhood, peace, and good-will. It represented approximately all the nations of the world, and therefore acted with the highest possible authority. It achieved several notable things: (1) By voting that a third world-conference should be held in or about 1915, it made itself in effect a periodic body. (2) It devised and adopted a working plan for the organization and procedure of a world court of justice. (3) Altho it failed to adopt a general treaty of arbitration, without a dissenting vote it indorsed the principle, and all but nine of the forty-four nations represented in the conference would gladly have become parties to such a treaty. This fact is so remarkable that it is worthy of special emphasis. All the forty-four governments in that great convention put the stamp of approval upon the principle of obligatory international arbitration. But traditional fear, suspicion, and jealousy of nations toward each other caused them to make an important exception to its application. This principle, they said, cannot be safely applied to the settlement of difficulties involving the vital interests and honor of nations. The reason given was that international arbitration was not in all cases a protection of a nation's vital interests and honor. This means that the world must take one step more before it can save the awful waste involved in the enormous armaments kept up by such countries as England, France, and Germany.

It is to induce the great family of nations to take this step, as the result of which the principle of arbitration may be applied to all international controversies, that the world-petition to the Third Hague Conference will be presented. It is in substance as follows:

We respectfully petition that at the Third Hague Conference a convention be agreed upon by virtue of which each nation shall declare itself in honor bound: first, to adjust in speedy succession all international interests by convention and treaties, each containing a clause pledging avoidance of war in the settlement of future difficulties relating to the given arrangement; second, while this adjustment of the international interests is in process of completion, to avoid war also in the settlement of any difficulties that may arise from an international interest not yet covered by a preventive convention or treaty; with the

understanding that the decision of any difficulty by pacific means shall, in no case, endanger the self-preservation and development of any nation.

In other words, this petition urges all governments to agree to guarantee each other's integrity and just development. If the nations of the world will only give this guarantee, we may feel sure that arbitrators will respect such guarantee when they decide any international controversy. Having advanced so far, all the nations can then agree, without in any sense endangering their vital interests and honor, to pledge themselves to refer to arbitration all controversies that cannot be settled thru diplomatic channels.

As an example of what this would mean to the United States, let me remind you that we have not yet finished paying for the Civil War, which closed forty-four years ago. Our pensions have in the past ten years cost an average of more than \$140,000,000 annually. In 1908 our taxation for pensions was nearly \$154,000,000, while in the same year we paid for the maintenance of the army \$111,000,000, and for the navy \$119,000,000, a grand total of \$384,000,000 credited to the army and navy account. Nearly two-thirds of our entire revenue is expended upon wars past and anticipated. Moreover, this material loss suggests untold suffering, which we must take into account in any attempt to measure the disastrous effects of war. For instance, if we count those who were slain on the battlefield in the Civil War, and those who died from wounds, disease, and hardship in wretched prisons, the loss of men—many of them the flower of the nation's young manhood—was equal to seven hundred a day during the four long years of the war. This wholesale destruction of the moral wealth of the country cannot be estimated.

Of course, I need not add that what is true for our own country and its Civil War is to a greater or less extent true for other countries and their wars. It is the sacred duty of the civilized world to divert the gigantic sums of national taxes from the destructive forces of war to the constructive arts of peace. The most striking paradox in all history is the lamentable fact that enlightened nations like England, Germany, and France insist upon wringing from economic production almost untold millions to be used in the brutal destruction of material wealth and human life, rather than in the furtherance of great reforms for the moral and social uplift of the masses.

As I have already suggested, there is just one way to abolish huge armaments and barbarous warfare, and that is by the education of public opinion. Such education is steadily going on. Ideas are growing into ideals and convictions, and these in turn are rapidly finding embodiment in organized action. Important among the organized forces is the American School Peace League, which "aims to secure the co-operation of the educational public of America in the project for promoting international justice and equity."

The principal officers of the American School Peace League are as follows: President, James H. Van Sickle, superintendent of schools, Baltimore, Md. Treasurer, B. C. Gregory, superintendent of schools, Chelsea, Mass. Secretary, Mrs. Fannie Fern Andrews, Boston, Mass.

There are five important committees. Two of these are the Press Committee and the Committee on Meetings, whose function is to make this movement in behalf of universal peace known to teachers thruout the country. The three other committees are engaged in constructive work. The Publication Committee is to publish books and manuals for the use of teachers and pupils. The History Committee hopes to develop among teachers a sentiment which shall lay emphasis on the arts of peace, and on the industrial and social conditions of the people, rather than on campaigns, battles, and other military details. The International Committee aims to bring about co-operation between American teachers and the teachers of other countries in order to develop common educational ideals in the interests of all. It is the intention of this committee in the near future to organize an International School Peace League with the American School Peace League as a branch. In Great Britain, France, Germany, Sweden, and Italy there are active groups of teachers who are ready to join such an International School Peace League.

But the American School Peace League is not alone in its work in behalf of developing ideals of international peace and good-will. Such organizations as the Interparliamentary Union, the Hague Conference, and the five hundred peace societies of the world are molding public opinion in favor of the new international spirit. Without question the most valuable work already done by the Hague Conferences has been the molding of this public opinion of the world.

You will remember that Abraham Lincoln's dominating purpose was to save the Union. He saw clearly that the cause of civilization would materially suffer if the great experiment in developing a Christian democracy in the United States should fail. And he was everlastingly right. The federation of states foreshadowed then, as it does now, the federated nations of the world; our national Congress, the congress of the world; and our Supreme Court the permanent international tribunal. These great embodiments of the co-operative spirit in political life have been of the highest value to our country and have reacted powerfully upon the international sentiment of the world.

It is, therefore, fitting that the American people, and especially that part of the American people represented by the public-school teachers, should take an active part in the transcendently important movement for international friendship and good-will—a movement which is in strict accord with the fundamental principles underlying our American democracy. Our duty is imperative. We must not, we will not, shirk our responsibility; and in no better way can we symbolize our loyalty to righteousness and justice than by signing and circulating the petition to the Third Hague Conference in behalf of the settlement of all international controversies by the peaceful methods of law, diplomacy, and arbitration.

THE MACDONALD COLLEGE MOVEMENT

JAMES W. ROBERTSON, PRINCIPAL OF MACDONALD COLLEGE, STE. ANNE
DE BELLEVUE, QUEBEC, CANADA

For the whole country as a matter of protection, safety, and insurance, it behooves us to look well to the training of the young people toward rural life, and to look well to the training of leaders for them. The Macdonald movement, as helped by Sir William C. Macdonald, has nothing destructive in it. It does not desire to destroy anything that now exists in rural districts, except weeds, but it hopes to help in building up something better than is now known and done, and thereby displace what is poor. It aims at helping the rural population to understand better what education is and what it aims at for them and their children. It plans to help in providing more competent leaders for the horticultural and agricultural population. Somebody's watchfulness, somebody's thoughtfulness, and somebody's throness are always required; and the progress of the people in all worthy ways can be increased in what might be called geometric ratio thru intelligent leaders who possess and use such qualities with unselfish public spirit.

At that time, in 1898-99, in fact before that, Sir William C. Macdonald had been most anxious to help to improve rural schools in Canada, and he came to me for some help in the way of plan-making and administration. I said that, in my judgment, the first thing to do was to give object-lessons of manual training in the elementary schools of cities and towns so as to educate public opinion in favor of better methods of education in places where newspapers were published and to which the country people looked for guidance. He rather demurred, saying that the city and town schools were already too good in comparison with the country schools, and tended to draw people in from the country to the towns in order to get education for their children. Afterward when he saw it would be a means of helping the rural schools he said, "All right, we will carry on the manual training in some town schools." The man in the rural district imitates the man who lives in town. The man who lives in town has the best chance of being a leader; and the man in the country would not be willing to take a lower grade of education for his boy than a town or city man. It was important to get the leaders from the city to recognize improvement by means of practical education. This was the reason for the Macdonald Manual Training Fund and its work. Manual training was the first step in this plan. The rural school was not an after-thought; it did not come out of the manual-training movement. The manual-training movement was a step toward the other end—that of improving the rural schools. Hitherto the wealth and wisdom of the country have been given to town schools. The little rural school has been left without hel

Sir William C. Macdonald furnished funds to establish manual-training centers in connection with the public schools in twenty-one places, from Prince Edward Island to British Columbia, and to maintain them without cost

to the pupils or the public for a period, in most cases, of three years. At first special teachers of ability and experience were brought in from outside, mostly from England. Some twenty-seven manual-training teachers were thus brought into Canada. As time went on Canadian teachers were trained and became duly qualified. Before the end of the period of maintenance by the Macdonald fund, there were forty-five manual-training teachers on the salary roll at a cost of some \$3,600 per month, and more than 7,000 boys were taking the courses. Summer courses were provided for teachers of urban and rural schools. In the cities on Saturday forenoons, or at some other convenient time every week, classes were arranged for the teachers from whose rooms the boys went to the manual-training centers. In Ottawa these classes were attended by over ninety teachers, and in Montreal and in Toronto by over a hundred in each place. This work was begun seven years ago and in 1903 (in Montreal in 1904) the local authorities in the several provinces took over and extended the work. The equipment was presented free to the school boards, and in the case of the normal schools to the provincial governments. Now over 20,000 boys and girls in Canadian schools receive the benefits of manual training in their regular course under the school authorities as a result of Sir William's benefaction in giving that form of industrial and agricultural education a good friendly lift.

SEED GRAIN PRIZES

Out of the Macdonald Manual Training Fund came the Macdonald Seed Grain Competition carried on by boys on farms dotted all over Canada from the Atlantic to the Pacific. The main purpose of this movement was to improve the crops of Canada by encouraging the general use of seed improved by selection from varieties of which the product is in demand or has a relatively high market value. The use of such seed increases the quantity of produce per acre; makes the quality better, and thus renders rural occupations more profitable and the people who follow them more prosperous and more contented. I went to my friend, William C. Macdonald, of Montreal, and said in substance: "Here is a great chance to do some educational work in progressive agriculture; to do something interesting, something attractive, something definite, something beneficial to the whole community, something easy and yet with plenty of difficulties. Farmers and their families may fail to appreciate the educational advantages of a plan or scheme set out in a written statement, but here is something which would be so helpful and instructive to boys and girls that they would go on with it, and the habits of observation and thought and study would go on with them." I told him \$10,000 for prizes would set and keep this thing going for three years. He provided the money with all good-will—my little \$100 come back a hundred fold—to offer as prizes to boys and girls to encourage them to carry out in practice the plan of selecting the largest heads of the most vigorous plants and growing seed from those heads on a plot by itself.

The yields from the crops of 1900 compared with those of 1903, on an average for all Canada for spring wheat, showed an increase of 18 per cent. in the number of grains per hundred heads, and 28 per cent. of increase in the weight of grains per hundred heads. In oats the figures were 19 per cent. of increase in the number of grains per hundred heads, and 27 per cent. of increase in the weight of grains per hundred heads. These are results from several hundred seed grain plots operated by boys and girls. Altogether over 1,500 entries were received. Out of that number 800 completed in full the first year's work, and 450 of them completed the three years' work in a satisfactory manner.

CANADIAN SEED GROWERS' ASSOCIATION

Many of the farmers on whose farms the competition was carried on were formed into the Macdonald-Robertson Seed Growers' Association, out of which grew the Canadian Seed Growers' Association. Its third annual meeting was held in June, 1906, and the report of its proceedings contained a marvelous record of valuable public service. Particular information was obtained from leading members of the association. These reported several distinct and definite gains from the method of selection which had been followed by the members of the association—namely: the size and quality of the kernels definitely improved; the strains of selected seed maturing more evenly; the strains becoming better adapted to local conditions; varieties being kept pure; the strains becoming more resistant to disease and gaining in productiveness. All these are highly desirable and give added value to the crops in every case.

I made inquiries last year from the Seed Branch of the Department of Agriculture and from members of the Canadian Seed Growers' Association. I gathered from their estimates that one of the direct results from the seed grain competition was an increase in the value of the grain crops on the relatively few farms as yet following the selecting practice to the extent of at least \$500,000. That is high finance for you. High finance by a man of lofty intelligence and spirit—5,000 per cent. on an investment of \$10,000, and the best of it all is that Sir William Macdonald has not sought and did not receive a single dollar of return for himself from it. That is laying up treasures where neither moth nor rust doth corrupt and which goes on gathering and diffusing benefits for ever and for ever for the people.

SCHOOL GARDENS

Under the Macdonald Rural School Fund, arrangements were made for providing a school garden at each of five rural schools in each of five provinces. A trained instructor was placed in charge of each group of five gardens and of the nature-study work at them. He spent one day at one school and the next at another. The cost of this was met by Sir William Macdonald.

At the school gardens an effort is being made to give the children information and training in three important matters in connection with agriculture:

the selection of seed; the rotation of crops; and the protection of crops against weeds, disease, and insects. It is really industrial education. Children find out something by doing, observing, and recording the results themselves, and I say it over again that all worthy progress, in matters that are worth thinking about, springs from learning the lessons of consequences. As soon as a child understands that, and governs his life accordingly, he becomes a better pupil and the promise of a better citizen in every sense.

The school garden is one way of making rural life more popular as well as efficient. It may be the first step toward actuating the people to pay more to make the schools more efficient. The best education in rural schools should make the people like rural life and also enable them to make it more profitable. The best way to make any workman like his work is to make him understand it. The beginnings of all that and much more are laid in the schools.

In the largest school, two hours' work per week by the pupils was found requisite to keep the gardens in proper condition. In one school the enthusiasm was so great that the pupils did all their garden work outside the regular school hours. At this school, also, the garden did not suffer from neglect in the slightest degree during the midsummer vacation of six weeks. Experience indicates that when the gardens are fully organized the plots can be well kept by devoting two half-hours per week to the work. This time is mentioned, not as the ideal condition, but as an encouragement to those who may desire to start school gardens in districts where prejudices are likely to be met. The fact is that in the ordinary ungraded school, and for that matter in the urban school as well, the working power of the pupils is ill-sustained thruout the day owing to their merely forced interest in much of the prescribed work. An awakening as to the educational waste of our schools is coming, and when the school garden is seen in its true relation, it will have a period in each day of the school program during the growing season. The children have ample time to spare, and the work of the gardens is promoting their intelligence and progress in the ordinary school course.

Mr. E. A. Howes, who is now principal of the Macdonald Consolidated School at Guelph, Ontario, had charge of the school garden nearest the city of Ottawa. I venture to include the following extracts from an article by him:

Bowesville, Ontario, which is situated six miles south of the Dominion capital, has long been regarded as one of the most progressive sections in the progressive county of Carleton, and it is to the active interest of its people in the welfare of their school that the credit for a large measure of the success of the movement here is due. They have never interfered but to aid. Land sufficient to make a school ground comprising two and one-half acres was purchased, and this was enclosed by a neat fence with turned posts and attractive gates.

The daily attendance at Bowesville school may be placed at approximately fifty children, ranging from six to sixteen. The plan of dual ownership of garden plots has been followed here, a senior and junior pupil having joint ownership in a piece of ground (ten feet by twenty feet), working in conjunction and making a just division of the spoils at time of harvest. This plan gets over the difficulty experienced when juniors are shouldered

with the entire responsibility of managing a plot, while it does not destroy the sense of ownership which makes proud the juvenile gardener. In laying out and cultivating the garden plots the entire work, with the exception of the ploughing of the ground, was performed by the children and, it may be added, cheerfully performed. Neighboring farmers brought manure for the garden and ploughed the ground.

The experimental plots, belonging to the senior class, deserve special notice. Experiments in crop rotation, in the effect of clover growth, and in potato spraying have been carried on and results carefully noted. Bowesville is the center of the largest potato producing section in eastern Canada, so particular attention was paid to potato spraying experiments. In addition to the class experimental plots mentioned, three of the oldest pupils carried on an independent experiment in spraying. Care was taken that the crop received neither more nor less attention, other than the spraying, than did the crop in a neighboring field. Rows of potatoes sprayed with Bordeaux mixture were grown beside rows receiving ordinary attention. When the resulting crops were piled side by side in the toolhouse, showing an increase equivalent to more than fifty bushels per acre for the sprayed over the unsprayed crops, and also a decided improvement in size and quality, the farmers sat up and did more thinking than would have been the case had they read of the same results in some agricultural publication. It is not so much what these plots teach as it is the trend of thought induced.

The following extracts are from letters and reports received from teachers in charge of school gardens, Carleton County, Ontario:

The school garden seems to fill in the weak parts of our education for the growing child, as it tends to the molding and developing of his character. I know that the general discipline in my room has been helped by the garden work and also that the pupils like their work in the schoolroom better on account of it. If our politicians would try teaching school with a garden and then without one for two years, as I have done, I am certain that they would be willing to grant all the financial support required; yes, probably be too liberal with it.

(Miss) M. YORK

Richmond Public School

My pupils are more observant than they were before we started school garden work, and seem to acquire a clearer understanding of all their work. Mr. A—— told me that the school garden had been a benefit to his boys, and that they were more independent in their work both in school and out of school.

W. PETTAPIECE

Principal North Gower Public School

I am ready to put myself on record as saying that the school garden has relieved much of the drudgery of the school work to which I was always accustomed. This year we had our school garden and it has been the pleasantest year of my school work. I would never again pass a summer without a school garden. I consider that the chief value of the school garden lies in the effect which it produces on the moral tone of the school. The juvenile sense of ownership is the greatest insurance on the success of the garden and incidentally on the care of the whole school property. The garden is the central point of interest for this end of the township, and it is not unusual to have as many as a hundred visitors at the garden on one Sunday afternoon. I have noticed that the cultivation of flowers has received more attention in the homes since the advent of the school garden, and I am often consulted about this work. I have not heard any unfavorable opinion expressed by responsible persons in this community, but on the other hand the most progressive men have spoken highly of the garden work.

B. A. HOWES

Macdonald Consolidated School, Guelph
(Late of Bowesville Public School)

It is impossible to overestimate the value of school gardening on our boys and girls. Instead of being detrimental (as at first supposed) to their advancement in the other branches of learning, it has had the opposite effect. Since engaging in the work my boys and girls have been first in all examinations, competing with children from other schools, including city schools. The whole tone of the school has been improved morally, socially, and esthetically. Our boys and girls have now a reverence for life unknown before, and it has awakened in them, as nothing else could do, a deeper interest in all life around them. It has helped to make school life a pleasure. Now the boy makes the excuse to get to come to school instead of the excuse to remain at home. It has aroused the interest of the entire community. The parents take a pride in "the work of our boys and girls in the school gardens," and never fail to bring visitors to see the work that is being done there. The pupils learn practical gardening, and already their advice and assistance are often sought by parents and others interested in the cultivation of plants. Its influence is seen also in the plots and flower borders outside. Our school board has come to realize the value of this work and are anxious to have it continued.

G. A. MOORE

Principal Carp Public School

CONSOLIDATED RURAL SCHOOLS

Four object-lesson consolidated rural schools were provided by the Macdonald Rural School Fund—one in each of the four provinces of Ontario, New Brunswick, Nova Scotia, and Prince Edward Island.

They were located at places chosen or approved by the Provincial Departments of Education. In each case a new building was erected to take the place of the small schools which at that time were serving the single sections proposed to be consolidated. They were each equipped with ordinary classrooms and an assembly hall, and also for manual training, household science, and nature study with a school garden.

A consolidated school board was elected according to the school law of the province concerned. The school in Nova Scotia was opened in September, 1903; in New Brunswick, September, 1904; in Ontario, November, 1904, and in Prince Edward Island, early in the summer of 1905.

The Macdonald Rural School Fund meets for a period of three years the additional expense of the consolidated school over the cost of the small rural schools which formerly served the locality. The school sections contributed exactly the amount of the former expenditure, and the extra cost is met by the Macdonald fund for three years to enable the people of four provinces to have these object-lessons and experiments in education.

The educational results from these schools have been entirely satisfactory to the authorities, to the teachers, and especially to the parents and children. The average daily attendance at the consolidated schools was on the whole over 55 per cent. higher than the average daily attendance at all of the schools which formerly served the localities; at Kingston, N. B., it was over 140 per cent. higher.

The attractiveness of the consolidated schools becomes in itself a form of compulsory education—the interest of the children being the power which secures regular attendance. A great point has been gained when love of the school and love of education there set the pace for progress.

One of the gratifying results is the large number of boys and girls, young men and young women, from rural homes, who are doing advanced or high-school work. At one of these schools there were about 100 pupils in the high-school grades. Many of these are preparing to be teachers in rural schools. When teachers, who themselves have been educated in consolidated rural schools, with nature study, household science, and manual training, teach in single rural schools they will make the influence of their own training tell thruout many of the one-room schools.

THE MACDONALD INSTITUTE

Notable results have followed in several of the provinces from these object-lessons—consolidated rural schools. Dr. MacKay, superintendent of education in the province of Nova Scotia, writes that in his province 53 schools have been consolidated into 22 effective ones. In the province of New Brunswick there are four large consolidated schools, each with nature study and school garden, manual training and household science. The provincial government pays half the cost of conveying the children and gives other special grants.

Sir Willam Macdonald gave the sum of \$182,500 to provide buildings and equipment at the Ontario Agricultural College, Guelph, to train teachers now in the service for this "new education." Besides serving that purpose the institute has become a headquarters for manual training, for household science, and for providing short courses of instruction and training for farmers' daughters and others in cooking, sewing, domestic art, and other branches of domestic economy. Two buildings were erected. Short courses of instruction in nature study and school gardens were provided without fees to teachers. The governments of four eastern provinces where the consolidated schools were established gave scholarships to enable teachers to attend. Over 200 teachers have already taken these courses. When pupils who pass thru consolidated rural schools go on thru the normal schools, each with advanced work and suitable professional courses in manual training, nature study, and household science, they will be thoroly qualified to carry on this better system of education.

MACDONALD COLLEGE

Macdonald College has grown out of Sir William Macdonald's keen desire to help the rural population to build up the country and to make the most of it and themselves. In some measure it grew out of the school garden movement and the consolidated schools, to serve as a headquarters for the training of leaders. In some measure it grew out of the manual-training movement, which is a first necessity in the general education of pupils if they are to profit by technical and industrial education afterwards. In some measure it grew out of the oft-expressed desire on the part of the educational leaders over the whole Dominion for such advancement and improvement of education for rural communities as would not only prepare the children for life at its best in

rural occupations, but would also satisfy the people as being the right training for their children.

We are standing at Macdonald College for research work and for illustration work in three of the important matters in agriculture: the use of selected seed on suitably prepared ground; the proper rotation of crops (which is hardly understood and certainly is not practiced in the eastern part of Canada, excepting in parts of Ontario); and the protection of the crop against weeds, insects, and diseases. Each one of these three might increase the average yield as much as 25 per cent. within ten years wherever put into intelligent, careful practice. Our policy at Macdonald College is not merely to have research work along these lines, but to give illustrations along these lines wherever our students go, and we hope by and by to make every graduate of our college a leader to carry out this system of farming on his farm under college direction. He shall have selected seed (if need be, furnished by the college) grown on suitably prepared soil; he shall follow a rotation of crops properly adapted to his locality; and he shall be capable of fighting the weeds, insects, and diseases. Such illustrations on his farm will be a beacon light to the whole locality, and thus the lessons will be brought home in an effective way.

In our research work, because we have the means and the men, we want to make the benefactions of Macdonald College for rural communities extend as widely as possible. We carry on the work of the college in three departments or schools. In connection with the school of agriculture we have the research and illustration departments of which I have spoken. Then we have household science with research, and instruction for the homes of the people. That branch treats of the three prime necessities of life—food, raiment, and housing. It is just as important that the woman should be educated for her sphere of management as the man for his. In the school for teachers the instruction and training are for teachers preparing for city and rural schools. It is important that the rural school and its teacher should stand in with those two other activities—the occupations and the homes of the parents—and that the children should be thoroly trained toward ability for, as well as an understanding of, what will be required of them in the fields and in the homes. The threefold character of the college fits it to train leaders for rural communities.

The work carried on at Macdonald College consists of instruction in the three fundamental, mothering occupations which nurture the race: first, farming, whereby man becomes a partner with the Almighty and, thru co-operation with nature, obtains the benefactions of Providence for food, clothing, and shelter; secondly, the making of homes; thirdly, the teaching of children.

At Macdonald College the education of leaders for those fields of human endeavor is being carried on in close co-relation. In times gone by the segregation of teachers-in-training, in institutions devoted exclusively to their use, had been no better for them than the isolated training of leaders for rural life in colleges of agriculture had been for their students. Until recently, neither of

them had much in their courses which identified formal or liberal education with the activities of the homes. The substantial advantages of co-education, in this larger sense, are already evident. The homes, the schools, and the farms are finding the common center from which radiate plans and labors: "A little child shall lead them."

EDUCATIONAL PROGRESS IN PORTO RICO

EDWIN G. DEXTER, COMMISSIONER OF EDUCATION FOR PORTO RICO

The educational problem which confronted the Americans upon their occupation of Porto Rico, ten years ago, was nothing less than the organization *de novo* of a school system for a population of upward of one million people. That they had little or nothing to build upon is shown by the fact that there was but one building constructed and used solely for school purposes within the island. There were about five hundred semi-public, semi-private schools, in which were in attendance a little more than twenty thousand pupils. These schools were held in private houses, usually the homes of the masters, and were extremely primitive, both in equipment and method. Parents who could afford to pay for the tuition of their children did so, while the poor were admitted free. For the instruction of this latter class, the government paid a small salary to the teacher, altho this salary was usually many months in arrears.

Of the inhabitants thruout the island, more than 80 per cent. were illiterate. Nowhere outside of the larger cities were books or newspapers to be seen. To no one had it occurred that the ability to read and write was worth while to any but the professional man.

* The American flag was welcomed upon its arrival, and the people as a class seemed willing and anxious to follow the desires of their new conquerors.

The organization of the school system was taken up with vigor, almost from the day of the arrival of the flag, and never since have the people, as a class, been other than most appreciative of what is being done for them along educational lines, and most enthusiastic in the support of educational measures. As may be expected with every people, there are some who, largely for political reasons, are open critics; and since the columns of the press are open to them, this comparatively small class becomes overly conspicuous. There are some who are honestly and openly opposed to the coeducation of the sexes, and considering the conditions of race, climate, etc., there is, perhaps, some basis for their contention. There is another small class which feels that the English language is being overly emphasized in the schools. There is another which is pleading for moral and religious instruction in the schools; but taken all together these various factions have not been able to retard, materially, the progress of the schools.

And what has the progress been in the decade? An increase in enrolment in the public schools from 21,000 to 105,000. The one lone building erected

for school purposes, at a cost, perhaps, of five or six thousand dollars, stands now with 193 other public school buildings, erected at a cost of more than \$760,000. No handsomer structures have been erected anywhere than the more modern public schools in Porto Rico. In San Juan we have one building of twenty-one rooms; in Ponce a group of school buildings on a single lot, containing more than thirty rooms, and in other parts of the island, plants in process of construction. Planned in a modified Spanish style of architecture, of cement block, with a flat or tiled roof, generous patios, and wide balconies, the public school building is the architectural beauty spot in most Porto Rican municipalities.

But, you ask, what of the schools themselves?

Under the present educational organization, the island is divided into thirty-five school districts, each under the direction of a superintendent, who is appointed by the Commissioner of Education and is his personal representative in the district. The schools are of four classes: high schools; graded schools; rural schools; and special schools. In the three largest cities of the island—San Juan, Ponce, and Mayaguez—are high schools having the four-year course, whose students are admitted, without examination, to many of the better colleges and universities of the United States. In each of these schools is a well-organized commercial department. Besides these three full-fledged high schools, in four other towns of the island one year of high-school work is offered, to which will be added, each year, further work until the full four-year course is organized.

The graded schools are maintained in each of the larger centers of population in the island—about eighty in all—in many instances carrying the children thru the full eight years of the common school course. The total number of graded schoolrooms is 729. In 289 of these graded schools all subjects are taught in English, while in all of them English is taught as a subject.

Of the rural schools there are 1,158 distributed thruout the smaller barrios and remoter parts of the island. In a large number of these schools English is taught, tho it is not possible to secure competent teachers for the introduction of English in all of them. The regular course of study in the rural schools is of three years' duration, altho in a considerable number fourth-year instruction is given.

In the school systems of all of the larger cities are teachers of music and drawing; the special schools consist of agricultural schools, kindergarten, and night schools, there being eight of the first, five of the second, and one hundred and eight of the last class of schools.

The agricultural schools are situated in the country districts, and have adequate grounds for the maintenance of school gardens and for practice in elementary agriculture.

Kindergartens are situated in the larger cities, while nearly every center of population of large size has one or more night schools.

But, you say, give us a pen picture of some of these schools.

The most numerous, and, perhaps, the most interesting of them all is the rural school, which takes the place of the little red schoolhouse of New England.

In Porto Rico it is quite likely to be of thatched roof, with walls of palm boards or even of "yagua," a part of the royal palm. If you were to station yourself near any one of the thousand or more of these simple schoolhouses at eight o'clock in the morning of any school day, you would see approaching in one's or two's or little groups, wending down the narrow paths from the mountain side, little black-haired, bare-footed, simply but neatly dressed children, many of them with books under their arms. Soon comes the teacher, who opens the door and gives us a peek inside. There we, perhaps, see the modern iron school desk, tho more likely benches, made by the local carpenter of "asubo," perhaps mahogany, seating five or six pupils. The room has maps and blackboards, a desk for the teacher, and more than likely a portrait of McKinley, Washington, Lincoln, or Roosevelt.

At a command from the teacher, the pupils, forty or fifty or even sixty of them, line up facing the building, while the teacher raises the Stars and Stripes, which flies over every school building in Porto Rico thruout every school day. As the flag ascends, the children salute and repeat the words: "I pledge allegiance to my flag and to the country for which it stands: one nation indivisible, with liberty and justice for all." One hundred thousand prospective American citizens are doing this every morning down in Porto Rico.

Once inside of the schoolroom, you could hardly distinguish this school from many of the rural schools we know in the United States, except that the children are a little more variegated in color, are more comfortably dressed, and are, perhaps, a little more studious than our youngsters at home.

The graded schools are much better housed and equipped than are the rural schools, always using the modern iron desk with adjustable seats and having all the apparatus of a first-class school. The grading is fully as far advanced as we know it in the best schools of the States; in fact, my own boy of eleven, upon entering the sixth grade in San Juan, had much greater difficulty in keeping a high standing than he had ever had in his previous school experience.

The teachers of the lower grades are largely Porto Ricans, while in many of the larger cities all the grades above the fifth are taught by American teachers. The examinations in the graded schools thruout the island are uniform, the questions being sent out from my office. At the end of the eighth grade a diploma is given granting admission to the high schools and to the normal school, as well as granting eligibility to certain classes of scholarships in the United States.

This leads me to call attention to the system of scholarships in vogue in the island. Thru legislation passed one year ago, school boards are empowered to use an amount of their funds, not to exceed 5 per cent., for the purpose of maintaining in the graded schools those pupils who have completed, with

credit, the work of the rural schools. This makes it possible for any bright pupil, even in the remoter barrios, to complete the eighth grade of the school course. Having received his eighth-grade diploma, there are open to him, thru appointment by the Commissioner, one hundred scholarships, at a value of \$100, each, annually, in the high schools of the island; or, in case his preference leads him in another direction, there are open seventy-five scholarships in the normal school, at a value of \$200, each, annually; or forty scholarships in the agricultural department of the University of Porto Rico; or twenty scholarships at a value of \$250, each, annually, for study in such institutions in the United States as Tuskegee or Hampton institutes. A boy or girl, having received a scholarship either in the normal school or in one of the high schools, is eligible, upon completion of the four-year course, to one of the thirty-nine scholarships in the colleges and universities of the United States, each of the annual value of \$500. I doubt if a more complete plan for the survival of the fittest, educationally speaking, is in vogue anywhere.

But to return to our description of the schools. If you were to visit one of the high schools of the island, you would hardly be able to distinguish between the work done there and that in any of our first-class high schools in the States. Except for the instructors in Spanish, the teachers are all Americans, and, with few exceptions, college graduates who would be a credit to any educational system. In the graduation exercises, parts are usually taken in English; applause is as tumultuous and bouquets are as abundant as with our daughters at home.

In our kindergartens the interesting experiment has been tried of placing children who know not a word of English under teachers who are equally unproficient in Spanish, with the result that, before the end of the year, the children can converse more or less fluently in the English language.

As yet, because of financial and other reasons, the organization of manual-training work in the schools has not made the progress that might be wished. For two or three years a system of mechanical schools was in operation, but before my arrival upon the island they were closed thru the failure of the legislature to make appropriation. It is my hope, at as early a date as possible, to re-establish, perhaps under the auspices of the University of Porto Rico, higher mechanical instruction, as well as to introduce into the graded school courses in manual training and domestic science. We must, however, wait for a legislature that is more willing to make appropriation for educational purposes than was the last.

During the past year three moves have been made by the Department, which promise to be of the greatest value to the island. One is the organization of school libraries, more than sixty of which have been established. In many instances these are nothing more than collections of fifty or sixty books placed in the hands of the teacher, with directions for charging out to pupils and other residents of the school district. It is extremely important that this move be extended, since without such libraries a vast majority of the twenty or

thirty thousand children who annually leave the schools would hardly be brought into contact with the printed page for the rest of their lives, thus making the "little learning" which they have acquired, if not a "dangerous thing," at least a useless thing. As the result of appeals which I have made thru the public press of the United States and in other ways, nearly six thousand volumes have been donated to these libraries, and I urge that others interest themselves in the library movement on the island. The steamboat companies plying between New York and Porto Rico very generously transport all donations to school libraries, free, and I shall be very glad to answer any appeals for information on the subject.

Another movement of importance is the establishment of school banks thruout the island. Within the past year such banks have been established in two hundred and seventy-five different schools, with thousands of depositors. In the city of Ponce alone, the deposits since January have averaged more than one thousand dollars monthly.

A third movement is the establishment of children's playgrounds. Of the sixty-six municipalities in the island, more than forty are planning the immediate establishment of such playgrounds, and seventeen are already in operation. Dr. Curtis, secretary of the Playground Association of America, visited the island in December and gave impetus to the move.

But what, you ask, will all this educational interest and outlay result in? An immediate result should be the granting of American citizenship to the Porto Ricans. They are ready for it. With the change of flag ten years ago the Porto Rican became a man without a country, having renounced his allegiance to Spain and being refused citizenship under the Stars and Stripes. Citizenship would not mean statehood to the island; merely the acceptance of the Porto Rican as a brother under the flag.

A gradual result of the educational movement in Porto Rico should be a greater participation in the affairs of government, with perhaps ultimate statehood for the island. While the people as a whole are unanimous in their desire for citizenship, the desire for statehood is not felt by all. What the future of the island in this respect will be, it is difficult to predict with certainty, but if statehood comes at all it should not, in my opinion, be in the immediate future. With the present status of education and literacy on the island, the people are not ready for the degree of participation in the affairs of government which statehood would mean, and I say this with all kindliness and with the deepest feeling of affection for a people that I have learned to love for their many kindly characteristics. But with the educational progress that is now being made, for the enrolment in the public schools has increased more than 60 per cent. in two years, those are now alive upon the island who should see the lone star of their tricolored flag transferred to the azure of the Stars and Stripes.

IN MEMORIAM—DR. JAMES HULME CANFIELD

NICHOLAS MURRAY BUTLER, PRESIDENT OF COLUMBIA UNIVERSITY
NEW YORK CITY

[*Stenographically reported*]

It is not easy for me, standing in the spot where my friend was to have stood, to speak however briefly and inadequately of one whom I hold to have been a great American citizen, as he was a dear and close companion. It is particularly hard to speak of one whose last words bade us not to attempt, out of what he well knew was the wealth of our affection, to hold any meeting or exercises in his memory.

On March 18 last Dr. Canfield was sixty-two years of age. Perhaps it was because it was his birthday that he was led to give himself in the solitude of his study to an hour of reflection, familiar enough to him, on the deeper things of life. It may have been that his great spirit saw the shadow of the Rock of Eternity creeping slowly toward his feet as the sun of his life made its westering in the sky; for on that day he wrote with his own hand a message to be read by his son only after the final summons should have come. From that message I will read a brief paragraph—a message from the man himself:

I do not wish to seem ungracious, but it will please me better if there shall be no memorial meeting—nothing of the kind. I have lived my life as best I could. No one knows better than I its shortcomings, and I shall be more than content simply to abide the quiet judgment and the kindly remembrance of my neighbors and friends. If those with whom I have been associated, who have known me in my several undertakings, occasionally speak of me with kindly thoughts of the past, it will be reward and notice enough.

How else than with kindly remembrance can we speak of Canfield?

I used to say to him, partly in jest but more in earnest than he knew, that while I had known Christian women, I believed he was the only Christian man I had ever met. His religion, his faith, his devotion, his service, his sacrifice, were genuine, and real, and boundless, and unending. See at how many points he touched our American life! Born in Ohio, he was educated in Vermont, in New York, and in Massachusetts. In his maturer years he lived in Iowa, in Michigan, in Kansas, in Nebraska, in Ohio, and in New York. Everywhere, in each of these commonwealths, he carried that splendid spirit of service which became synonymous with his name in thousands of American homes and in thousands of American schools. Few faces and forms were more familiar than that sturdy frame of his, with its splendid head and heart, four-square to every wind of opinion that might blow, which led a life solely of principle and devotion.

Whether he was learning the elements of railroading in Iowa, or practicing at the bar in Michigan, or teaching history and economics in Kansas, or guiding the policies of the state university of Nebraska and Ohio, or inspiring the life of our great metropolitan university, he was always the same. There was no change in his sturdy simplicity. There was no selfishness or self-seeking, no

lack of clear vision, no lessening of hold on the eternal verities that guided his noble life.

How patient he was with the typical errors of the pedagog, yet how fully he understood them! I remember a story that he told of himself when he was Chancellor of the University of Nebraska. Toward the close of the college year a young tutor of mathematics who was completing his first year of service came into the Chancellor's office and asked whether he was to be reappointed for another year. The Chancellor said, "Well, what do you yourself think of your work? What have you done that you are proud of?" The young tutor answered, "Mr. Chancellor, I have just held such a stiff examination in my course that I have flunked sixty members of the freshman class." The Chancellor looked at him kindly and said, "Young man, suppose I gave you a herd of one hundred cattle to drive to Kansas City, or Omaha, and you came in to tell me that you had driven them so fast, and so hard, and had made such good time, that 60 per cent. of them had died on the way. Do you think that I should want you to drive any more cattle to the Missouri River?" "No, sir," said the tutor. "Well, I do not think we will let you drive any more freshmen." That was characteristic of Canfield, of his insight, of his wit, and of his good sense.

Just before the last days of his illness came upon him, feeling at peace with himself and with the world, knowing that he was soon to die, yet sorry to go because he felt that he might have something still to do for his fellows, Dr. Canfield copied out and kept with him these beautiful lines:

Remember me when I am gone away,
Gone far into the silent land;
When you can no more hold me by the hand
Nor I half turn to go, yet, turning, stay.
Remember me when no more, day by day,
You tell me of our future that you planned:
Only remember me; you understand
It will be too late to counsel then or pray.
Yet if you should forget me for awhile
And afterwards remember, do not grieve;
For if the darkness and corruption have
Even a vestige of the love that once I had,
I shall prefer that you forget and smile
Than that you should remember and be sad.

I cannot speak more of Canfield; my heart is too full. The older members of this Association knew him well. For three years he served this body as its secretary; one year he adorned it as its president. He was with us at Cleveland a year ago; he loved our Association's high traditions; he loved his associates among its members; he believed in it with all the ardor and vigor of his being.

Let me read a few sentences from a letter written of him by Michael Sadler, our distinguished English colleague and friend who knew him well. Sadler wrote:

He left upon my mind an almost unique impression of vitality. He was quick with human sympathy, and in his humor there was tenderness which comes from a wide experience of men and things heightened by Christian faith and charity. He was a great organizer of his time and thoughts: one who had leisure from himself for the need of others; a giver of himself to institutions; a man in whom the buoyancy of youth and the ripeness of age were singularly combined. I loved him and shall always think of him as we saw him at Columbia and at Oxford; here at Weybridge, and for the last time in an upper room in the Thackeray Hotel in London when he was full of that last inquiry of his, in which he touched so many deep and difficult matters with firm insight and courage. *Lux perpetua ei*: he brought to so many sunshine and light.

Of all the experiences of Canfield's life those in Kansas made, I think, the deepest and most lasting impression upon him. It is related, you remember, that Queen Mary of England said that after her death the name Calais would be found graven on her heart. I cannot help thinking that on Canfield's tired heart the name Kansas was written. The fourteen years that he spent in that state, the years of his young manhood, were full of meaning for him. He entered into the splendid commonwealth building of that epoch with energy, with zeal, and with high intelligence. He joined hands with the eager spirits of the young idealists who so distinguished the state of Kansas in the 70's and early 80's. The years that he spent in Kansas and the Kansas friends were always close to his heart. Tho in later years the fortunes of life called him to other parts of our country and to new fields of service, and to environments that he loved and delighted in, yet I feel sure that Kansas always meant more to him than any other place that we associate with the story of his life.

So I say to his departing spirit as the shadows of life are lengthening about each one of us, "Good-bye, old friend! Good-bye, old friend! and may the everlasting light shine upon you who brought light and sunshine to so many human lives."

SHOULD THE PUBLIC SCHOOL BE THE BULWARK OF PUBLIC HEALTH?

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Within a month there was held in the city of Chicago a National Conference on Criminology, conceived by the officers of the Law School of the Northwestern University as a means of celebrating its fiftieth anniversary, and designed to consider primarily criminal law with reference to its correction and reform.

Incidental to this purpose came, as a matter of course, analysis of conditions underlying the causation of crime and delinquency. If the deliberations of that conference could be carried to their legitimate end, the conclusion would be reached that effective dealing with crime lies in prevention, and the further conclusion would be practically unanimous that the pathway to prevention lies thru education.

At the last International Congress on Tuberculosis wherein was gathered the intelligence of the civilized world concentrating its power upon this great

public question, it was concluded, as it has been concluded before and since, that the ultimate solution of the problem of tuberculosis must lie in the territory of prevention, and it was and is further concluded that the essence of prevention, the indispensable factor looking thereto, is education.

At all the active world-conferences upon political conditions, looking to the betterment of the social structure and a higher type of living, invariably and unerringly the line of analysis runs thru the field of prevention or avoidance of evils, back to the fountain head of human intelligence—to the culture of the human mind.

Finally, and most impressive, the field of medical science has been brought under this illumination, and medical intelligence today stands firmly upon the ground that the combat with disease is fundamentally a question of hygiene, which, being interpreted, means a question of prevention, and this in its last analysis means a question of education.

This universal reference of the great problems of life, back and back thru whatever steps may be involved, to the training of human minds, that is, to what we call education, is a little suspicious. It looks as tho the tendency of this reasoning were to get back to a generality and to suggest a result more or less unattainable in its remoteness. In fact, to some extent this is true, and in so far as it tends to place the responsibility for conditions upon antecedent conditions at the moment irremediable, it is a source of weakness.

The fact that we, today, face conditions which had their origin far back does not in any sense justify our neglect of present results nor lessen our obligation to struggle with the morbid conditions which we find; but quite beyond the efforts of the world to deal with its social disease in its present form as best it may, lies the obligation to transform this generalization—prevention thru education—into a militant activity which shall ultimately achieve the correction of our social errors.

For the most part the possibilities of education are concentrated upon the education of the young, and the logic of the situation leads to certain conclusions which have yet to undergo a tedious probation before they become effective convictions.

One may view the progress of events with weariness but not discouragement; with intolerance but not impatience. Under this broad social conception, how long will it be before the nurture and culture of the child will be regarded as the greatest question open to the operation of human intelligence? How long will it be before the world is convinced that the greatest of all professions is the profession of teaching? How long will it be until the spirit of the public toward its educators is one of broad and liberal sympathy, which shall place them socially and materially upon a plane of commanding superiority?

I refer to this question of the status and function and recognition of the teacher, not for the gratification of voicing my own appreciation, but because the theme which I am about to discuss and all possibility of a practical bearing

to my mind is predicated upon a competent, intelligent, and progressive pedagogic body.

My belief is that the maintenance of physical well-being or health is fundamentally a moral question. In this statement I do not mean to reiterate simply the doctrine to which all subscribe that we are under moral obligation to secure and maintain in our children the best possible health. That is obvious and accepted and, in a more or less effective way, striven for. What I wish to enunciate is: first, that the moral progress of the race is dependent upon its physical well-being; second, that an intelligent building and maintaining of health is a function of character and inseparable from a healthy *morale*.

If health were universal and automatic and the social conditions related thereto better, it would not be so easy to discern this relationship to race progress. A study of social conditions as they are yields the most convincing proof of the enormous importance of defective health in the causation of social disease.

It is, of course, to be admitted that industrial conditions and a variety of inequalities of opportunity and capacity have much to do with bad health; but it is also true that even under the existing laws of society, the health of the people could be vastly better than it is.

Whatever that relationship may be, analysis of the situation shows clearly enough that poverty, crime, viciousness, and inefficiency are preponderatingly due to defective physical condition.

The bearing of this is co-extensive with human pursuits. In infancy we have learned the lesson of the "bad" child; in school we have learned the lesson of the backward child; in sports the incompetent child; in the factory or workshop the inefficient hand; in asylums and almshouses the defective individual; in the courts the habitual criminal; in the saloon the besotted habitué; in society the invalid parasite; in business the perverted marauder; in the pulpit the distorted bigot; in the schoolroom the nervous critic—all of them harking back to a foundation of imperfect health for the common factor in explanation, and even in extenuation, of their faults.

Statistics are open to interpretation and hence not to be followed too closely; nevertheless, extensive observation throws much light upon these questions.

In the great cities, broadly speaking, 85 per cent. of the relief extended thru organized charity is made necessary by sickness and accident. Our increasing social delinquency, growing out of poverty and its necessary conditions, is thus directly and causally coupled with ill-health. That these unfortunate conditions in turn produce and aggravate disease, establishing thereby a vicious circle, is beside the point. The fact upon which we should focus our attention is that imperfect health is an effective barrier to individual development and an enormous clog upon social progress.

The impression prevails widely that ill-health is unavoidable and that

most conditions of disease are not only inscrutable, but that they remain at a certain degree of destructiveness unaffected by human endeavor or intelligence. This is positively untrue. The average duration of life has increased markedly in the last few centuries, and this increase is noticeable in direct proportion to the progress in civilization of the various peoples under observation.

This is true in spite of the fact that the conditions of urban life operate strongly in the opposite direction. What the showing would be if this entirely removable incubus were to disappear is a matter of conjecture, but enough is known to warrant us in saying that public health is susceptible of improvement to a very great extent, and the sentiment has become fixed in the minds of students of social economy, that this is the greatest conservation field that is before us today.

It appears that this matter of adjusting mass conditions is to be the function of the state, and it is consequently imperative that all of the factors or units of influence should be rapidly and effectively aligned in furtherance of this governmental control. It is not going to be enough that schools be brought under medical inspection and organization on the basis of health. The most that can be accomplished thereby will be inadequate to meet the conditions. Habitation, food, and habits are factors of equal importance, and the real and ultimate problem of the school is how to become an effective influence upon this outlying but essential territory.

Is it too much to anticipate that the school shall become a social center; a reservoir of intelligence as to living conditions, into which shall flow streams of social influence tending to universal betterment, and from which shall emanate the laws of intelligent living?

Unless we conceive an entirely new machinery so related to our governmental structure and so related to our child nurture, we have no alternative than to settle upon the school as the proper instrument of popular culture. So far as I can see, no better instrument can be desired. Our machinery exists, and what we now need is inspiration. Where shall we look for inspiration? I am convinced that it is only to be found in widespread opinion as to values; in the deep and fundamental conviction on the part of an intelligent minority as to what are the essentials in education; in a thoroughgoing recasting of our views as to what the state owes to its people, that is to say, to itself.

Too long have we gone on under a conception of education that aims to provide a child with a minimum amount of information looking to its economic independence, and too superficially we have touched the problems of culture and spiritual development, without which life never rises above the dead level of material existence. Too exclusively we have concentrated upon simple mental acquisition more or less rudimentary, ignoring the great forces of life which are sweeping on irresistibly to results dire or benign according as we adjust ourselves to them. Far too uniformly have we permitted the pressure of circumstances to drive us to the illogical position that education of the child is a dual process partly to be done in the school and partly to be done in the

home. In short, educational effort in general has failed to conceive the development of the child as a coherent process to which it is bound to contribute a comprehensive sympathy and discriminating judgment as to values, and a firm guidance and authority expressed in the broadest and simplest curriculum that can be made effective.

I beg you not to convict me of ignorance of the vast chasm of disappointments which is suggested by the foregoing stipulation. The danger and the difficulty in the whole proposition is expressed in the term "ineffective." Well I know that the path of education is strewn with failures of good intention, initiated in this spirit and wrecked upon obstacles presented by existing conditions. All progress is like that, and it offers not the least reason nor excuse for abating one jot the effort to find a way out of the darkness. For the most part, failures have been legitimate and foreordained. Even where obstruction has been due to lack of vision and comprehension on the part of that mass of the community known as the intelligent class, which has damned the spirit of pedagogy with the odium of "fadism," failure has been logical.

We are in the midst of a material age in which an economic problem is scrutinized in the light of its commercial relations, and the preponderating mass of people who have advanced to the point of thinking about it at all have advanced only to the point where they can regard immediate industrial efficiency as the sole desideratum. When the mind of the public has reached the point where ultimate life efficiency shall have equal weight, then may the public school have a clear field and a comprehensive function. To this end, those who have vision must lead, and in this effort their foundation must be broad and deep and sound.

It is from such premises that one is entitled to the belief that the public school has no deeper obligation than to assume responsibility for the physical education of the child. If it were simply a process of decreeing good health, this would be true. If it were a laborious process of working out and bestowing good health, it would be true; but where the process of achieving good health involves the operation and integrity of every mental and moral fiber in the individual, this obligation becomes overwhelming and paramount.

Let us not be misled by the thought that the child is a natural animal, pursuing the course of nature and adapting itself, as intelligence grows, to its environment. Exceptionally that is true, but very exceptionally. Conditions of living are artificial; habits are imitative, and general conceptions of life are faulty.

On the whole, the maintenance of sound health must be a conscious process, intelligent and intentional. Does this seem to foreshadow a burdensome and unattractive mode of living? Surely to be constantly considering one's health, the pros and cons of conduct, the better and worse of method, and the good and bad in pursuits, all with reference to one's physical well-being, must be unwholesome, must it not? The answer to that query is simple. It depends entirely upon how one does it. One can do that thing in a way to

make of life a thing so unlovely that it is not worth preserving. One can magnify luxurious considerations of comfort, the solicitousness of precaution, hairsplitting definitions of hygiene, superficial trivialities of vanity, to the point of outrageous and disgusting selfishness. Better by far that the world should go on and find its solution in the most unthinking struggle for survival than that that spirit should be fostered or tolerated as a phase of education.

As a matter of fact, the very falseness of this conception determines the failure of such an effort. No health was ever achieved upon that basis. The conception is wrong, the purpose is wrong. The dominating motive under this idea is timidity, fear of ill-health, and avoidance of discomfort. It is essentially a negative impulse, unbalanced, querulous, and cowardly. It makes people dependent, victims of their own distorted minds, a burden to the strong, and a prey of the unscrupulous. Perish the thought that we should counsel cultivation of that sort of self-consideration!

The ideal of physical integrity glorifies the body to the point of a willingness to make the sacrifices necessary to maintain perfection. I think the word "glorifies" is not too strong. I speak not of pride of bone and brawn, of physical prowess or beauty or skill; all of these are of it, but not it. I speak of that sense of well-being, courage, self-reliance, hardihood, and harmony with nature in the individual whose physical equilibrium is the product of intelligent living and the object of conscientious attention. Herein lie power and freedom. Are these not a foundation for glory?

Unusual natural endowment is no necessary part of this. Undue physical development is quite apart from it. That person is exceptional, no matter what his natural limitation, who cannot attain the physical poise necessary to this great emancipation.

I fancy I hear the comment, "That is not physical poise, that is mental poise." They are inseparable.

It is true that inferior physical status can be dominated in a measure by mental effort. It is true that the results of physical disability can be mitigated by spiritual equilibrium; but taken by and large, mental activities pay tribute to physical condition, and physical aberrations dominate, deteriorate, and destroy as inexorably as do other physical and chemical forces which control the course of the world.

It is small wonder that those who have seen and appreciated the maladjustment of life, in which mental and moral instability play such a part and permit such havoc, should strike at this point as the root of social disease.

While estimating these factors at their full and true value, those who know this subject most deeply know that there is a territory in which actual and demonstrable forces play, unconquerable by will, uninfluenced by thought, acting and reacting with perfect relation of cause to effect, which are the product and logical sequence of conditions antecedent and more or less avoidable.

The educated medical mind knows this. To a distressing degree it does not know what to do about it. Much of the physical perversion which we call

disease is terminal and fixed. Naturally, then, the medical mind seeks the sources of disturbance, strives to detect the earliest departure from the normal, and reaches the conclusion that the effective effort of the race must rest in maintaining the normal.

If this were susceptible of mass control, and if we could determine and define the canons of health, adherence to which would insure the health of all the people, the problem would be comparatively simple.

To determine the facts would be the first step. To establish the authority necessary to universal observance would be the second step. So far as I know, neither of these steps has been suggested as possible by any careful mind.

The detailed facts of hygiene, tho susceptible of some generalization, are essentially individual, and an individual's study of his equation is the important need. Observance of detailed and intimate methods of life on the part of an individual can never be reached by edict. The motive and authority for this is internal and comes only in response to consciousness of the importance and dignity of the subject. From the point of view of an educator, therefore, the question becomes like any other question in education: not simply what material to present, but how to secure its assimilation.

All teachers know the subtle evasiveness of the child mind in the face of coercion. The precept which a child does not incorporate finally into his philosophy is lost. Mere instruction offered to the young as to laws of health is almost useless. Here and there a general principle hammered enough and reiterated enough may serve as a rallying-point for a later intelligence, but the real fabric of education is woven in the experience of daily life. So it is that I say that the physical education of a child must be determined by something that is basic, by a receptiveness that I believe can be furnished only thru evolution of an ideal of physical development.

Let us not make the mistake of thinking that the child and the adult could reach this result by the same path. The adult, if he reaches this conclusion and adopts it, does so by a process of annexation, belated and imperfect. The child, if he gets it, grows it, and it is a part of himself, unconscious, at first, and largely automatic. Never will the result for the child be achieved until the adult who rears him has adopted the ideal. To you, therefore, who are intrusted with the young, and I think the responsibility for the future of the world, I make this earnest plea: that you take this matter at its full value; that you surround it with all the color and all the quality possible and necessary to its attractiveness; that you dignify the subject to the point where you are willing to give it commanding importance in the curriculum at any point.

Assuming your acquiescence herein, what is necessary to do? What is it necessary to be? Why speak of "sacrifices necessary to the maintenance of health"?

The world lives not by thought but by imitation. Fashion controls the activities of life and, curiously enough, there is a constant mimicry of the

so-called "classes" by the masses. There is no doubt that this is an unconscious tribute to what is assumed to be cultivated intelligence. Nothing better expresses it than the keen analysis of a laboring man whom I once heard exploiting the subject to a fellow-laborer, who was commenting adversely on some fashionable people who were dining out in public view. With a fine irony, he rebuked his companion, saying, "Jim, they're layders," and when Jim asked, "What the divil is a layder?" he replied, "When folks gets to do in public what common folks does in private, they're layders." Is it not true that is the way we fashion our lives?

With the progress of civilization comes steady increase in the facilities for living. Convenience and comfort are generally increased. Resources and materials for furthering activities and happiness are enormously developed. The result is that, for the people who have access to these resources, the line between necessities and desires is lost and we find acquired a myriad of wants which, for the most part, are confused with needs.

Avoiding all discussion of these as an economic question, my theme directs me merely to a discussion of the good or bad in this in relation to physical well-being. One cannot go into this in detail, but it blocks itself out in thought clearly enough. Given the ability to procure unlimited food, what determines the amount and character of the food that we eat? When all things are available, what guides us in our doings? When we have a distinct choice as to the amount of physical labor we shall perform, upon what do we decide the question? So with our sleep, so with tobacco or alcohol or narcotics, the question is pertinent, upon what ground do we adopt and pursue our daily habit? I venture the assertion that for the most part the grounds are two: fashion and self-indulgence.

Altho I am predicating unlimited access to things, this indictment is by no means confined to persons of wealth. Almost everybody above a certain level has sufficient choice in this matter to participate in all abuses. Does any one of us underrate the difficulty of selecting a path divergent from the common, and more or less counter to it? Stop and think. Are not all our personal and domestic habits fashioned upon a conventional method which is modified from time to time by influences which are arbitrary or accidental?

Without attempting to dispute that the gradual working-out of a method of living by a people in the process of civilization has a certain *a-priori* sanction as a phase of evolution, I assert that, in matters of health, this is especially open to scrutiny and review, and so far as we act individually, we fail to exercise such discrimination.

Every practicing physician knows the difficulty of inaugurating new habits in those whom he has occasion to advise. The reasons for this are many. Sometimes it is embarrassing to be different from other people. Sometimes it is disagreeable to do a hard thing, when an easy thing is at hand. Sometimes it is a bother; but the real difficulty lies in the attitude of the individual toward the project. He goes to his physician looking for dictation rather than

light. He accepts whatever he may get on a basis of obedience rather than instruction. In short, he is seeking a compromise on the score of his comfort rather than knowledge to fortify him in a real desire to maintain an ideal.

What the physician encounters is typical of the usual attitude. It takes self-discipline to be abstemious. It takes self-respect to be individual. It takes self-possession to be undisturbed in the confusion of social opinion and prejudice. For that reason I say health cultivation is a function of character.

Granted all these attributes of an intelligent individual, there still remains a necessity for a true conception. There is basic morality in physiology as there is in theology. It is as false in physics as it is in ethics to determine conduct on the basis of penalty. Let us fix this distinction clearly. We live correctly, not to avoid disease, but to attain our birthright. The principle is constructive, the obligation is supreme.

The point is to attain the best individual development that is possible. The process must be thru demonstration and interpretation. Is it not perfectly obvious that this can only commence in childhood, which is tantamount to saying that it must be accomplished in the school?

I protest earnestly against any philosophy which tends to obscure this obligation. Let us remember that to be charged to the degree that teachers are charged with the welfare of humanity is an awe-inspiring responsibility. Decisions which are reached must not be matters of taste or fancy or idiosyncrasy. They must be right.

I admit freely that to establish this conception of physical well-being generally is not only enormous in its magnitude, but a reversal in human philosophy. So much deeper, then, the reason for grappling with it; so much the more satisfactory as an opportunity for real achievement.

Logically, the first step is so to determine the sanitary conditions of our custody of the children as to promote and insure their well-being.

Actually, this desirable position is far off. A campaign of education of the public—lay, pedagogic, and official—will have to precede any satisfactory advance. Let us remember that the child of today is the public and official of tomorrow, and take heart. Meanwhile, there lies within the control of school teachers a powerful influence. The factors in this are two: the curriculum, and co-operation with the authority of the state.

The public-health function of the state is nowhere more potent than in its relation to the school. In the existing state of society there is a tendency to clash between school authorities and school population. There is a territory of intimate mutual interest lying between the school and the home, in which neither has indisputable authority. It is right and necessary that the state occupy this field and determine the law that shall govern these reciprocal relations.

For the present it is important that there be public supervision of such a character as to give continuity to the efforts that are initiated in each territory

as they spread into the other. Hence, for example, the importance of reinforcing school inspection by visiting nurses or of counteracting parental laxness by official inspection.

We shall see that the state will broaden its interest and responsibility in these matters until protection is realized. Necessary as this is on the basis of protection, if it is well carried on it becomes of important educative value and will enhance the public appreciation of intelligence in living.

The school teacher can perfect or ruin this attempt according to his efforts in co-operation. Though it falls far short of a solution of our problem, it is obviously the first step and is imperative.

As the idea of the social character of the school grows, opportunity to touch effectively the real life of children will broaden. When the day comes that the child seeks his light in the school as naturally as he seeks his orders, the school will have come into its own.

At present, the great limitation upon the school is in lack of facilities. Tradition and economy are hard masters. Overcrowding, bad air, poor light, imperfect seats, and insufficient teachers are charged to lack of money. Rigid ideas as to confining children hour after hour to their desks like cattle in their stanchions, prolonged pursuit of mental tasks, unrelated to interest and unassisted by inspiration, are chargeable to tradition.

Lack of money is not really lack of money. It is lack of willingness to divert money sufficiently into its proper channel. It is really lack of conception.

Tradition is not insuperable. It is to a very large extent an obstacle because teachers are insufficiently represented in the councils which determine teaching methods.

The interest of teachers can be stifled by sufficient non-participation in the intellectual activities involved in the school management. No part of the curriculum is more vulnerable to stupidity than that which concerns the physical well-being of children. No part is more in need of initiative on the part of the teacher. We are bound to do this work better.

I repeat, the process must be thru demonstration and interpretation. Can we hope for any impression upon the developing child unless we furnish that child obvious, hygienic methods during its school life? Can we hope to derive full benefit from the most perfect hygienic conditions unless the significance of these conditions is interpreted?

The child must grow its conception and there must be concurrent and incessant association between proper conditions and appreciation of their value.

For our possibilities of demonstration, we must plead with the public for generous and enlightened disposition of funds; for our interpretation, we depend solely upon the pedagogic force.

Let us ask this question: To what extent is the average school curriculum based upon or related to the physical needs of children? I do not mean to

imply in this question that it is not to a considerable extent so related. Is it, however, fundamentally determined by those needs? Ought it not to be?

Let us approach this question from another angle: What is the attitude of the school authorities in the most enlightened educational circles with reference to children who are physically defective? Is it not true that an effort is being made, here and there, to find a solution of the problem by a radical departure in system? I call your attention, for example, to the celebrated school at Charlottenburg, created for the special treatment of sick and debilitated children. This enterprise was instituted to meet serious conditions. If such children were treated in sanatoria, they were not educated. If they were educated in schools, they declined and died, or became hopeless invalids. The combination of a sanatorium method and school was found largely to solve the problem. A very great percentage is restored to health. Practically all reach normal educational standards. Nine-tenths of them are able to resume school work.

In the light of this illustration, is there any reason why a school curriculum based upon judicious hygiene should not be the prevailing type instead of the exceptional type? This is a repetition of experience. Methods which are found to be necessary and effective to cure established disease give the key to a proper hygiene for those who are still normal. You have seen this illustrated familiarly. Since the world has discovered the proper treatment for tuberculosis, the notions and habits of innumerable people who are well have been molded to correspond to the principles involved.

I do not suggest that the average school be brought to the extreme type of the special school for the defectives. What I wish to emphasize is that there is neither logic nor justice in recognizing hygienic principle only for those who are ill. Wisdom dictates that the principles of hygiene be determined broadly and practicably and that they be accepted as the initial point in the determination of a school curriculum.

This is not the point at which to attempt to discuss the detail of such a program. The thing to establish is acquiescence in the proposition that sound hygiene is fundamental to any school curriculum.

There are certain defects, however, which it is worth while to touch upon. Perhaps chief of these is the question of fresh air. No problem of the school-room is more difficult to solve under existing conditions. None is more crucial. I cannot take your time to go into that in detail. I must ask you to fill in the things I leave unsaid; but this I wish to say: the child should be educated to an abundance of fresh, cool air, fresher than it is accustomed to, cooler than is perhaps comfortable at first. If involving a process of hardening, why not? Please believe that I realize the difficulties in this suggestion. Obstruction, complaint, and criticism are inevitable. School architects and school authorities have not crossed the threshold of this proposition. No matter what the difficulties, it is an absolute necessity that this question be met. It will pay many fold, not only in health, but in educational results.

Let us take another question—that of physical activities. I wish to take unequivocally the position that competitive athletics, under the conditions prevailing at present, are a serious bar to general physical development. Whether in themselves objectionable depends upon circumstances. At present they usurp and monopolize the field of physical development to the extent of limiting participation to those who have signal ability. They concentrate interest upon competitive success and not at all upon intrinsic physical superiority. From the primary grade to the end of the college course this criticism is progressively just. Until athletics (so called) can be put in their proper position of exceptional demonstration functions, they will continue to be a seriously pernicious factor in this educational field.

Every child should be trained physically to its best point, and no influence which stifles interest and cripples effort by establishing impossible standards can be permitted to dominate indefinitely.

Children cannot be *forced* into a process of physical development which shall be continuous, without interest. So far as I can see, this interest can only be supplied by evolving gradually and consistently an ideal of physical perfection to which each shall adhere as tenaciously as to any standard in life.

Let individual achievement displace the desire for conspicuous success. Let emulation take the place of disheartened envy. Let a high standard of school superiority displace the feverish eagerness for the glory of a winning team. Then may we hope for general growth of an ideal which shall guide our physical lives.

In conclusion, let us recognize that mental, moral, and physical poise go together.

Disciplinary factors, external and internal, involved in self-control are of incalculable value in the growth of character.

Is there any prospect of realizing our legitimate hope for the race struggling with the incubus of civilization, except in the apprehension, by teachers, of the importance of this matter? Is there any other class of society which can undertake to develop and mobilize the conviction necessary to accomplish this regeneration?

HYGIENE IN THE BOSTON PUBLIC SCHOOLS

J. E. BURKE, ASSISTANT SUPERINTENDENT OF SCHOOLS, BOSTON, MASS.

Popular education subserves a twofold purpose. It enables every child to rise to the height of his capabilities and his aspirations, and to become a citizen of power in the service of the state. But if the individual is to realize his possibilities and fulfil his civic responsibilities, in body as well as in mind, he must be developed to the highest tone of efficiency. Here, then, are reciprocal obligations. The individual must cultivate sanity of body and mind, and the state in turn must surround him with guarantees and safeguards essential to his welfare and likewise to its own integrity. With patriotic motive, there-

fore, we rejoice to join in this widespread propaganda for the promotion and the conservation of the national health.

Boston blazed the way for the whole country in 1894 by the adoption of a system of medical inspection of schools which has ever since remained in vogue. This system briefly described is as follows: Deriving authority from the Board of Health and serving under its direction, medical inspectors, eighty in number, visit daily the schools within their assigned districts; inspect pupils reported by the teachers; suggest medical or surgical treatment wherever either seems desirable; and in cases of diseases contagious, infectious, or suspicious, they recommend the exclusion of children from school. As officers of the Board of Health they likewise attend to the isolation of pupils thus excluded, and impose the conditions of readmission to school.

Negatively speaking, the medical inspectors do not visit the classrooms to examine pupils, and do not prescribe or offer any medical services further than indicated above.

The School Committee of Boston did pioneer work in 1907 when it united the various elements affecting the physical welfare of pupils and teachers—the physical-training, the sanitary, and the hygienic agencies—and grouped them within a single department with a director of school hygiene in control.

This Department of School Hygiene—the first of its kind to be organized in this country—besides the director, includes assistant directors, instructors in physical training (women), instructors in athletics (men), supervisors of playgrounds, playground teachers, assistants in playgrounds, assistants in sand gardens, instructor in military drill, medical inspector of special classes, supervising nurse, and assistant nurses.

The appropriation for the maintenance of the Department of School Hygiene is secured by a special tax levy, and cannot be diverted from its specific purpose. The department again is befriended by the method of appointments. Eligibility for service in any position is dependent absolutely upon certification. The certificate of qualification is secured by the candidate successfully passing an examination prescribed by the Board of Superintendents. In several of the grades of certificates, in addition to academic requirements, a classroom demonstration of skill is required.

It is the policy of the school authorities to welcome the co-operation of other intelligent forces for the popularization of constructive health. Local physicians are public-spirited and helpful. A commission of physicians has recently submitted a report upon the health of children attending the first three grades; a committee of oculists and electricians has reported upon the artificial lighting and color-schemes of school buildings; still another commission has made a contribution to the problem of tuberculosis among school children.

With the approval of the School Committee the Director of School Hygiene has appointed an Advisory Board for his department. The personnel of this Board comprises representatives from the Harvard Medical School, from the Massachusetts General Hospital, and from social service workers; a medical

inspector; the chairman of the committee on athletics at Harvard College; and an army officer, a graduate of West Point.

The first subject presented for the consideration of this new Board was an interesting one. A suggestion came from a prominent physician that cultures be taken from the throats of all children about to enter school in September, the object being to ascertain the prevalence of diphtheria among school children, and to detect and isolate the carriers of the germs. The Advisory Board decided that the original suggestion involved too many complexities, but recommended a modified plan which was approved. It is proposed, therefore, that the experiment be tried in that section of the city known as Brighton, and that cultures be taken from the throats of school children of all grades, public and private, approximately four thousand in number. The examination will be conducted conjointly by the Board of Health and the School Committee, upon the reassembling of the children after the summer vacation.

The results of this investigation should furnish some criteria for determining at what times and to what extent physical examinations of school children should be made. The yearly examinations of all children for defective hearing and vision, as now required by law in Massachusetts, point unmistakably to the desirability of examining all children when they enter school for the first time, as well as periodically thereafter.

No accurate data are anywhere available showing the relation of the physical to the mental development of children. At the opening of the next school year it is the intention of the Department of School Hygiene to weigh and measure every child in the public schools who is five years of age. An examination of these same children will be repeated semi-annually until the end of their school life. It will be interesting to trace the progress of this experiment.

Within the teaching corps likewise are advisory councils. For instance, a committee of thirty teachers conspicuous for their interest in physiology and hygiene has been appointed by the Board of Superintendents to co-operate with the Director of School Hygiene in interpreting the new course of study in physical training for the elementary grades. This committee meets with the director and discusses with him the content of the course and the methods of instruction. From the viewpoint of the director these teachers get a clearer perception of the relative order and proportion of subjects. They derive no little enthusiasm from the community of their efforts.

The members of this committee, to each of whom a definite district has been assigned, then become the teachers of their fellows whom they call together from time to time and communicate to them the instructions and the deliberations of their conferences with the director.

Thus uniformity of work and of method is established, vigilance is aroused, intelligent oversight is assured, and the fact that teacher as well as pupil is awakened to the demands of personal hygiene are considerations too vital to be disregarded.

The professional equipment of the teacher is defective without an acquaintance with health problems and an ability to deal with them. Special attention, therefore, is devoted to these subjects at the city normal school. The Director of School Hygiene personally meets all the pupil-teachers in groups. Lectures are given by specialists on the eye, the ear, the skin, the nervous system, digestion, and tuberculosis. The interrelation of teacher and school nurse is made clear. Early signs for the detection of common diseases are pointed out, and a clinic is given before each division of pupil-teachers, illustrating common forms of skin diseases, facial expression of sufferers from adenoids, and other noticeable defects.

A setting-up drill of ten minutes' duration is a requirement in the program of every high school in the city.

Instructors in physical training (women) are in charge of the gymnasium practice that is required of all girls in high schools. But in addition to these duties the instructors are expected to care for the physical welfare of their pupils. They weigh, measure, and examine the girls, recommend corrective exercises, and keep a discriminating record of the girls' physical condition from year to year. When the exigency seems to justify it, the co-operation of the family physician is invited.

But above all, these instructors are the girls' advisers in affairs pertaining to health, and often become the girls' confidants during this critical period of life. The optimist takes an additional hope as he reads the reports submitted by these physical-training instructors. These records show conclusively that the girls are not impaired in health, that they are uniformly normal, and that they give every promise of robust womanhood.

High-school boys are required to take military drill. By statute law of the commonwealth "the School Committee may supervise and control all athletic organizations composed of pupils of the public schools and bearing the name of the school;" and furthermore, "it may directly or thru an authorized representative determine under what conditions such organizations may enter into competition with similar organizations in other schools."

Boston has availed itself of these provisions, and the school authorities maintain absolute control over all school athletics; over all games, plays, and sports; over all rules governing the same; and over schedules of all contests. Instructors in athletics, holding certificates of qualification issued by the Board of Superintendents and appointed by the superintendents of schools from rated eligible lists—these, and these alone, are privileged to act as coaches for the various school teams; and whenever at any of the athletic events additional assistance is required it is cheerfully rendered by men from the regular teaching force.

If it be true that the battlefields of England were won upon the playgrounds of Eton, what human tongue can foretell the victories to be wrought out upon the playgrounds of the Republic—of the weak made strong; of reserve power treasured; of initiative awakened; of courage enkindled; of manliness aroused;

of selfishness repressed; of self-mastery won; of joy experienced; of purposes fulfilled?

Here again Boston is fruitful and patriotic. Her playground system comprises twenty-two schoolyards for younger children supplied with suitable equipment and under the control of certified instructors, open from April first to December first; twenty additional schoolyards without either equipment or supervision, open the whole year round; fifteen children's corners in park playgrounds adequately equipped and supervised, open from April to December; and twenty-eight athletic fields for the advanced elementary-grade pupils. From April first to December first, while the schools are in session, these athletic fields are under the supervision of sub-masters and men teachers, ninety-four in number, who accompany their pupils to the fields after school and meet them there on Saturday morning. Bats, balls, and equipment for other sports are provided, and all boys of the seventh and eighth grades are required to participate in some athletic event. In summer when the schools are not in session and during the winter months these playfields are supervised by the instructors in athletics. Thus opportunity for play is afforded continuously at all seasons of the year.

A supervisor (a woman physician) and thirty-four assistants constitute the corps of nurses. Under the rules of the School Committee a school nurse must be graduated from a hospital giving a two-years' course of instruction in nursing, and must pass an examination satisfactory to the Board of Superintendents. The examination includes academic and professional subjects, and a demonstration of the candidate's skill at a children's clinic. The names of successful candidates are placed upon a merit list from which appointments are made by the Superintendent of Schools. The duties of the nurses are varied. They co-operate with the medical inspector, receive his reports, and follow his suggestions. They visit the schoolrooms and talk to the pupils upon such subjects as care of the teeth, and proper nutrition. They advise with teachers concerning special cases. They accompany excluded pupils to their homes; sometimes give directions to mothers concerning the child's care and diet; recommend that a physician be called; and frequently with the consent of parents conduct children to the hospital or dispensary. They "follow up" cases of exclusion by the medical inspector and give attention to children after hospital treatment. On Saturday mornings they escort groups of children to the offices of private dentists or to dental clinics as circumstances may dictate. They are instrumental in securing glasses for children who otherwise might go unprovided. They have established most cordial relations between school and home, and in many instances they have been veritably the harbingers of fresh air, sunshine, cleanliness, and dietetic reform. There is no attempt to patronize or to paternalize, to coerce or to usurp. All that is done is strictly educative and altogether confidential.

In October, 1908, an open-air class for tuberculous children was established. Thirty-eight children have been admitted to the class, all of whom were posi-

tively diseased. Twenty of this number have been dismissed entirely cured and have been reinstated in their regular classes without loss of grade. Another experiment with pupils of low vitality has been conducted in another quarter of the city with gratifying results. And it has been decided by the School-house Commission that in all buildings hereafter constructed a room shall be provided especially adapted to pupils who are physically subnormal.

On May twelfth Health Day was inaugurated in Boston schools at the suggestion of the Director of School Hygiene, and the pupils of all grades united in its celebration. The essentials of good health and its accompanying advantages were extolled. Health for the day was paramount. In the elementary grades stories were told and lessons taught upon a variety of suitable topics, such as sunshine and fresh air, proper nutrition, cleanliness, correct breathing and standing and walking, the cigarette, and the prevention of tuberculosis. Wherever it was practicable, out-of-door games were encouraged and demonstrations of physical exercises were given. In the high schools the social, economic, and ethical value of health was emphasized. The demand for men and women, clean alike in body and mind, was elaborated upon. Physicians became instructors for the day. Teachers seized the opportunity to reinforce the lessons on constructive health; parents came to cement the bonds between hygiene in school and home; and the children rejoiced in the advent of a brighter day.

THE DEPARTMENT OF SCHOOL HYGIENE IN THE ST. LOUIS PUBLIC SCHOOLS

BEN BLEWETT, SUPERINTENDENT OF INSTRUCTION, PUBLIC SCHOOLS
ST. LOUIS, MO.

The history of the establishment of this department in St. Louis shows such a natural development of a special function that it is likely to find its counterpart in any large school system.

The medical profession of the city, of course, realized long ago that the great number of children in the public schools, coming from all conceivable conditions of environment and heredity, gave the best possible field, if it could be used, for scientific investigations of the body and mind of the child. The opportunity for such investigation was sought repeatedly and in 1891 permission was given to Dr. Porter, an eminent specialist, to make a study of the physical growth of St. Louis children. The results of the investigation were published in the *Transactions* of the Academy of Science of St. Louis in April, 1894, and became noted.

At the meeting of the Committee on Instruction in February, 1898, a communication from a committee appointed by the St. Louis Hospital (Alumni) Association, requesting the Board to introduce medical inspection, was read. After a thoro discussion of the question, the committee decided to recommend to the Board the adoption of the following resolution:

Resolved: That, in view of the arguments advanced by a committee of the St. Louis City Hospital (Alumni) Medical Society, the Board of Education recommend to the Board of Health of the City of St. Louis, that said Board of Health submit to the Municipal Assembly an ordinance providing for the appointment of one or more medical inspectors to visit the public schools daily, under the direction of the Board of Health, for the purpose of examining and removing children who are affected or threatened with infectious diseases, said inspectors to be paid by the City of St. Louis.

No action was taken by the Municipal Assembly to carry into effect the suggestions of this resolution. The Hospital Association then sought and obtained from the Board permission to undertake with its own appointees, and without cost to the Board, the investigation in a portion of the city that would give a cross-section running from the river to the western limits and including all conditions from the slums to the best residence districts. A printed report of the investigation was submitted and the Board was again importuned to take up the work.

In June, 1899, the committee reaffirmed the position it had taken in February, 1898. In the committee meeting, May, 1900, the superintendent stated that he desired to recommend to the Board the appointment of a medical officer, with the rank perhaps of assistant superintendent, whose duties would consist of looking after the general sanitary condition of the schools; the health of the children in general, such as instructing teachers concerning eye and ear tests, and cases of contagious disease; vaccination; in fact, to have general supervision over the hygienic conditions of the public schools. After some discussion of the matter, the committee decided to defer its consideration until the special meeting which would be called during the month for the purpose of considering the superintendent's list of nominations.

At the special committee meeting in the same month, Mr. Eliot's motion to appoint a medical officer was discussed, and the committee agreed to defer further consideration of this matter until September next. On inquiry from the members of the committee, the superintendent stated that the services of such medical officer would be an advantage in the following directions, and others.

1. Visits to the schools, to inquire into their sanitary condition.
2. Instructions to principals and teachers in regard to school hygiene. Conference with the Building Department in regard to the same matter.
3. Issue of certificates to teachers who are in ill-health, when the question arises whether they ought to be allowed to continue in their classes. Examination of pupils reported from some chronic and possibly contagious disease.
4. Determining the proper time for the return of children that have suffered from contagious diseases.
5. Instruction to teachers concerning sanitary matters in general, and in particular showing how to test the eyes and ears of children for the discovery of abnormal cases.
6. Inquiry into cases of defective or mentally abnormal children now in the public schools. Passing on the question whether they ought to be excluded from school or not.
7. Issuing certificates to young teachers prior to their appointment.
8. General supervision of the vaccination of the pupils by the physicians of the Board of Health.

The question under discussion involved both function and finance. The

funds of the Board of Education are derived largely from a special school tax and are consequently not appropriated out of a general city fund; so the question of who should pay for the work partly obscured the question of responsibility. No action was taken upon previous recommendations. During the next six years, the question was again raised in one form or another but the Board did not at any time change materially from its position that the Board of Health should be responsible for the inspection of health conditions, while the responsibility for sanitary conditions rested on the Board of Education.

In 1906 the necessity for establishing schools for individual instruction of children of defective mentality became evident. In its discussion of the plans for this work, the committee resolved:

The committee recognizes the necessity of medical inspection, and examination for admission to the defective schools in particular, as outlined in the report of the superintendent, but the committee is of the opinion that the appointment of a medical expert by the Board should be deferred until the system is in operation, and that the superintendent be authorized to obtain the necessary medical advice and that the Board pay for such services a legitimate fee.

In its meeting, May, 1907, it discussed further the superintendent's plan for the special schools and was of the opinion that while medical supervision for the purpose of discovering cases of incipient disease among the children was the function of the city authorities and not that of the Board of Education, there should be sanitary inspection of the schools by some well-qualified officer and this person should also have charge of the defective schools and control, under the direction of the superintendent, admission to the same.

In its meeting, October, 1907, the committee briefly discussed the establishment of defective schools for defective children which was to be submitted to the Board in November, and they were of the opinion that medical supervision should be introduced by the employment of from one to three persons to inspect the sanitary conditions of the various buildings and also the special schools to be established. At the meeting of the Board in November, 1907, the superintendent's final plan for special schools was submitted and approved and contained the following paragraph:

Medical inspection of the children in these schools is a necessary condition of their full success. In some cases, the child is mentally weak on account of certain physical defects which, when once detected, are subject to cure or removal. The time of a physician would, as a matter of course, not be filled altogether by his duties in the special schools. The greater part of his time should be given to the sanitary inspection of the other schools.

At the same meeting, the Board approved the superintendent's nomination of a medical adviser and defined his duties thus:

The medical adviser shall be under the control and direction of the superintendent of instruction and keep such office hours in the rooms of the Board of Education and tender such reports as the superintendent may prescribe.

The medical adviser shall devote his whole time during the sessions of the schools in visiting the same, except when required by the superintendent to assist him in other duties. He shall report to the superintendent in writing on his inspection of the schools and recommend such measures as he deems conducive to sanitary interests.

The medical adviser shall inspect the conditions of light and ventilation in the various schoolrooms; also the heating of the schools and the temperature of the rooms. He shall examine the appliances of the school buildings and the practices of instruction in their sanitary aspects, and report his observations and eventual suggestions to the superintendent.

The medical adviser shall have authority, under direction of the superintendent of instruction, to instruct principals and teachers in sanitary matters.

He shall be authorized to instruct teachers individually or in such meetings as the superintendent may call, in the best ways of conducting elementary tests of the eyes and ears of the pupils. He shall inspect new plans of schoolhouses or of improvements and additions to the same, in order to observe whether they are in accordance with proper sanitary conditions.

In case of epidemics or accidents, he shall render medical advice and give such assistance as the superintendent may direct, provided, however, that he shall not undertake the treatment of diseases in cases coming to his notice thru his connection with the public schools.

He shall have power under the authority of commissioner of school buildings to give instructions to janitors in all matters appertaining to the health of pupils and teachers, and the sanitary conditions of the buildings.

In January, 1908, the committee took cognizance of a bill drafted by officers of the Health Department for presentation to the Municipal Assembly. The purpose of the bill was to establish a system of medical supervision of all the schools in the city. A copy of the bill was addressed to the Board of Education by the Health Department and suggestions as to changes or modifications were invited. The committee agreed to make the following report to the Board:

The committee has learned that a draft of a bill, providing for medical supervision of all the schools in the city by the Health Department of St. Louis, is to be submitted to the Board of Education for examination at the present meeting.

It is recommended that this proposed bill be referred to a committee composed of the president of the Board, the superintendent of instruction, and the attorney, and that if approved by this committee, the president is to communicate with the presidents of the City Council and the House of Delegates, recommending the adoption of the bill in question, after it has been introduced in the Municipal Assembly.

This legislation remained in debate during the year 1908; some holding that the work would be more efficiently done if under the control of the Board of Education, others claiming that there was doubt about this and that, if it were not doubtful, still the Board of Education should not bear the expense. Meanwhile the medical adviser was at work and was demonstrating his value by efficient service in connection with the special schools and in many other ways that could not have been foreseen. And finally, the Committee on Instruction reported to the Board at the meeting in January, 1909, that it approved the recommendation of the superintendent that a Department of Hygiene be established and maintained by the Board. In the meeting of the Board, February, 1909, the following report was approved:

Complying with the suggestions of the report of the Committee on Instruction submitted to the Board at the January meeting of 1909, the undersigned presents for the consideration of the Board the following as a plan for establishing a department, the function

of which shall be to discover and cause to be remedied, as far as possible, physical defects and communicable diseases that might interfere with efficient school work:

Amend Rule 8 by adding the following sections:

Section XVI. There shall be a division of the Department of Instruction, designated as the Department of School Hygiene.

Section XVII. The work of this department shall be:

a) To examine all of the pupils at least once a year for the purpose of ascertaining the existence of any physical defect that interferes with the pupils' progress in the school, and to report any such defect to the parents, and advise that the family physician be consulted.

b) To examine daily all evidences of the presence in the schools of communicable disease and to make prompt report of all cases of such to the Board of Health or its officers.

c) To examine the sanitary conditions of the school premises and to make report of it to the superintendent of instruction.

Section XVIII. The superintendent of instruction shall have power to appoint for this work: a supervisor of hygiene and as many inspectors of hygiene as the Board may from time to time determine.

The supervisor and inspectors shall be graduates of medical colleges of recognized standing.

Section XIX. The supervisor of hygiene shall be a skilled physician and shall have general supervision of the work of the department and such other duties connected with it as may be assigned to him by the superintendent of instruction.

He shall devote his entire time to the work of the department.

Section XX. The inspectors of hygiene shall devote themselves to this work for ten months in each year, and shall during all school hours be engaged in their investigations in the school buildings; and during the school term shall use such further time as shall be required for making the necessary examinations and reports.

No one shall be nominated for or appointed to the position of inspector of hygiene who has not passed successfully an examination offered by the Board of Education to all candidates for such positions. This examination shall be given both as a test of professional training and experience as a physician, and of personal qualifications for this special work.

Section XXI. The supervisor and inspectors shall be elected for a term of one year by the Board of Education upon nomination of the superintendent of instruction. The schedule of salaries shall be so fixed as to include the necessary expenses for carfare or livery, for which no extra allowance shall be made.

Section XXII. The supervisor and inspectors shall not treat any case of physical defect or disease that has been discovered by either of them while engaged in the work of this department.

Section XXIII. The provisions of the Rules of the Board of Education and of the Charter, relating to the suspension and removal of teachers, shall apply to the supervisor and inspectors in this department.

Section XXIV. The work of the department shall be conducted under such further regulations as may be prescribed by the superintendent of instruction with the approval of the Board of Education.

RECOMMENDATIONS

Should the above rules be approved by the Board, it is further recommended:

A. That the first examination for inspectors be held at an early date under the direction of the superintendent of instruction.

B. That the following five districts, composed of the school districts here given, be established for the present and until experience warrants an extension of the work:

District No. 1, Jefferson, Henry, O'Fallon.

District No. 2, Carr Lane, Lincoln, Franklin, Carr.

District No. 3, Madison, Laclede, Peabody, Clinton.

District No. 4, Lafayette, Humboldt, Carroll.

District No. 5, Delany, Dessalines, Dumas L'Ouverture, Attucks.

C. That each district be assigned to one inspector of hygiene.

D. That the work of these inspectors begin in September, 1909.

E. That the salary schedule be as follows: Supervisor, 1st year, \$2500.00; 2d year, \$2600.00. This salary to be paid in twelve monthly installments.

Inspectors, 1st year, \$1200.00; 2d year, \$1300.00; 3d year, \$1400.00; 4th year, \$1500.00. These salaries to be paid in ten monthly installments.

F. That a bacteriological laboratory be opened in the Board of Education Building, or in some school building, and that it be equipped with necessary instruments and supplies.

The opinion of the attorney was required on the suggested change of rules. The following portions of his opinion answer the question of right of the Board to undertake the proposed work:

Our State Constitution declares that a "general diffusion of knowledge and intelligence is essential to the preservation of the rights and liberties of the people," and therefore provides for the establishment and maintenance of free public schools. Pursuant to this constitutional provision, the General Assembly in 1833 provided for the establishment of such schools in St. Louis, and in that Act it was provided that the Board of Education

shall have power to make all rules, ordinances, and statutes proper for the government and management of such schools and property, so that the same shall not be inconsistent with the laws of the land, and generally to do all lawful acts which may be proper or convenient to carry into effect the business of the corporation.

It is a fundamental principle in statutory and constitutional construction that a comprehensive grant of power, particularly for the accomplishment of great public ends, necessarily carries with it the right to select any appropriate means which are not prohibited by law.

It therefore follows that the Board of Education may determine, in the exercise of a wise discretion, whether the establishment of a department of school hygiene, with a supervisor and a number of inspectors in charge, is a necessary or proper means for maintaining the efficiency of the schools, whether such means are reasonably required for "the general diffusion of knowledge and intelligence" which our Constitution declares to be "essential to the preservation of the rights and liberties of the people."

The superintendent of instruction made the following report to the Board at its meeting, April, 1909:

In accordance with the provisions of Rule 8, Section XX, and the action of the Board at the February meeting, Vol. XV, p. 1216, an examination of candidates for the position of inspector of hygiene was held on April 28.

The examination was conducted by the superintendent of instruction, assisted by the medical adviser and the assistant superintendents.

The examination consisted of a written test of professional scholarship and experience, and an oral test of special fitness for the work. The written test was covered by sets of questions on seven general topics. During the written examination, the candidates' papers were identified by the numbers and not by the names of the writers. In estimating the results of the examination, 50 per cent. was allowed to the written test and 50 per cent. to the oral test. The value of testimonials entered into the oral test. Fifty physicians having the qualifications required by the Board presented themselves for the examination. Of this number, forty-six were white men, two white women, and two colored men. Complete reports on the examination, including sets of questions given in the written examination, are placed in the files in the superintendent's office.

Upon a careful review of the per-cent. returns of the examination, without knowledge of the names of the candidates, it was thought best to report to the Board the names of all who made 75 per cent. or more and in the order of their standing in the examination.

The work of the new department will begin with the opening of the new school year. Each inspector will have under his care between three and four thousand pupils, including the pupils of one of the special schools for individual instruction.

The details of administration of the department are being worked out. These details will include forms of reports and records for the guidance of the department and for the information of teachers, physicians, and the general public.

MORAL TRAINING THRU THE AGENCY OF THE PUBLIC SCHOOLS

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Unless the signs all fail us, we are nearing the dawn of a new era which bids fair to form a better setting to the song of the herald angels than any which has gone before. It will prove no rival to the Victorian Age, with its development of arts and letters; and industrialism will point to other eras for her most wonderful achievements; but it will win a glory greater than these and far more lasting, for the hearts of an eager people will beat in sympathy with that of the Christ when he took little children in his arms and blessed them, and said: "For of such is the kingdom of heaven, and whosoever shall offend one of these little ones, it were better that a millstone were hung about his neck and that he were drowned in the depth of the sea." Perhaps, as the dawn grows brighter, someone will call it "The Children's Age."

One of the significant signs of the times is the marked attention which science is giving to the lifting of some of the burdens so long and patiently borne by the children of the poor. Helpless infants are kept from the blindness which follows improper attention; the lame are taught to walk, and the weak become strong; the spread of contagious diseases is prevented; and the awful law of heredity is stripped of half its terror by the wise use of training and environment.

The city of Glasgow has just completed a careful series of experiments which go to prove that children of bad parentage, if removed from vicious surroundings and carefully trained, can be made into upright citizens, with only a small percentage of failure; and the Barnardo homes for slum children in London are collecting ample statistics corroborating the same fact.

Municipalities are awakening to a new sense of their responsibility toward the right development of child life, and in addition to the large gifts made for public education, they are generously establishing playgrounds, gymnasias, bathing beaches, bath-houses, and other agencies which afford pleasure and recreation, as well as juvenile courts and such associations as promise protection for the weak and the ignorant. Child-labor laws are receiving the attention of state and national legislators to a remarkable degree, and woe betide that corporation which attempts to withstand the strong tide of public opinion which demands not only fair play, but generous consideration for the children who have to toil.

But most significant of all the signs which herald the coming of this new era is the earnest effort being made by educational authorities to increase the

efficiency of the public schools as an agency for the development of character. The schools have always aimed at this high ideal, and that which most stirs our hearts as we read the lives of the great teachers is their splendid struggle to attain this end. But, tho much has been done in the past, there is a deepening sense that our schools should become more effective along these lines, and that there are special conditions of ominous portent which make this demand doubly imperative at the present time.

Criminologists who have examined most carefully into the facts relating to juvenile delinquency speak in a rather discouraging way of the influence exerted by our public schools in the prevention of crime. The various church organizations, to which we look for spiritual leadership and religious education, do not hesitate to reveal an unfortunate state of affairs. The attendance at Sunday services and mid-week meetings is growing steadily less. The Sunday schools fail to reach as many of the children in proportion to the population as they did in former days, and the scholars remain under their care a shorter time. The authority of pastors and religious teachers is not what it used to be, and, as the result of historical research and higher criticism, only partially understood, many old beliefs have been swept away, and even the Bible, for some at least, has lost much of its wholesome influence.

The homes themselves, the very nurseries of our childhood, seem to be undergoing a silent process of deterioration, in which one of the prominent symptoms is the disinclination to undertake careful and systematic training of the young, but instead a willingness to intrust it all to the schools. Lay it, if you will, to a growing lack of parental authority; to the excessive demands made by our modern commercial and social life upon the heads of the family, or to the passing-away of those good old Puritan customs, such as morning and evening prayers; whatever the cause, the fact remains, and the school is becoming more and more *in loco parentis*, both as regards the soul and the mind of its pupils.

Thus, from far and near, a cry goes up to make the school a greater safeguard of the nation's virtues, to increase its efficiency as an agency for moral training and the development of character, and, to the everlasting credit of the teacher be it said, this appeal is meeting with a noble response both in our own and foreign countries.

From such great leaders as President G. Stanley Hall, Professor John Dewey, Dr. Felix Adler, Professor Michael Sadler, and a score of others who might be mentioned, there have come volumes and essays and inspiring addresses bearing upon this topic. Various governments have appointed special commissions to deal with the problem in its more complicated forms; and in two or three of the European countries, the fate of national parties has been largely determined by their attitude toward this all-important question.

The measures adopted by different educational authorities to attain the high aim we have under consideration have varied almost beyond number; but with every passing year there has come a clearer understanding of the

numerous factors which enter into the problem, and we may confidently predict that its correct solution, in accordance with the peculiar needs of each individual nation, will not long be delayed.

It was my privilege to have some part in a recent international investigation which served to show the methods used or approved by a majority of the educational authorities of Europe, and I venture to present here a brief summary of certain portions of that inquiry.

In regard to the much-debated question as to the ethical value of different studies, it was found that a vast majority of the teachers in the preparatory schools were inclined to believe that there is ethical value in all school work which calls for concentration and effort—"the blessedness of drudgery," doing to the best of one's ability "whatever the hand findeth to do"—but that history and literature (including Bible lessons) lent themselves more especially to moral instruction. As a whole, they were "strongly opposed to systematic moral instruction according to syllabus, as being too much in the air." They urged that the end to be kept in mind is not "stocking of the brain with moral tags; but the formation of moral habits, and habits can only be formed by getting the will to assert itself in action."

Speaking from personal investigation, carried on in many schools thruout Great Britain, I can say that no teacher in my hearing ever spoke slightly of Bible lessons; but, on the contrary, they were unanimous in praising their ethical value and in testifying to the satisfaction which they found in teaching this subject.

In one of the largest cities of Scotland, a Roman Catholic priest, who was a member of the school board, expressed to me his most hearty approval of these Bible lessons, saying they were the only religious and moral instruction which many of the children of his own denomination received, so careless were their parents, but he added that he would be glad to have the Westminster Catechism dropped from the school curriculum.

Another investigator, reporting on elementary schools in England, stated that it was the unanimous opinion of the teachers that "the root of all morality lies in religion, and that to divorce the one from the other is impossible."

In the opinion of nearly all, the secularization of the schools would be a menace to the national life. One head mistress has recently published "a suggestive scheme in which moral teaching based on religion is woven into every fiber of the curriculum." This report goes on to say that "it is the atmosphere of their schools, the influence of their own personalities, the children's strong instinct of imitation and keen desire to please upon which most teachers rely in early moral training, tho they also welcome openings for giving more direct teaching as the moral sense of the children gradually develops."

Take it as a whole, however, there is a strong opposition to what may be called the French system of direct moral instruction, one of the leading masters of Great Britain calling it not only "useless" but "really pernicious." He says: "One of the principal moral faults that a teacher has to fight, and one

which is fostered by the class system, is the want of truth. By this I mean not merely lying, but use of the teacher's ideas as the boy's own. He says not what he thinks, but what he thinks the teacher would like him to say, and the average teacher is blinded into thinking that the boy actually feels what he says. There is thus a double evil, and at the close of a moral lesson, one can well imagine the boy's answers, which, having the appearance of moral progress, are only the result of mental effort."

My own investigation in the schools of France led me to feel that systematic moral instruction was fairly well done, and productive of good results. I saw classes taught in this subject from the primary grades to those in the Lycée, and certainly there was no lack of interest on the part of either teacher or scholar. Indeed, most of the teachers in the public schools felt, as one expressed himself to me, that "the church is lost to the state, and the future welfare of the nation depends on the moral training afforded by the public schools." For them, this kind of training centers largely on moral instruction, and they, therefore, teach this subject with nothing less than religious zeal.

It is only fair to add, however, that one of the English investigators who later followed in my footsteps, reported thus: "It may be objected to all these lessons that, on the one hand, they are in danger of producing moral priggishness, or even hypocrisy as serious as the religious hypocrisy of former days; and that on the other hand the attempt to analyze motives and to examine into hypothetical exceptions to the general rules laid down may produce a mental attitude not far removed from that of a pupil of a seventeenth-century casuist."

In my judgment, this whole matter has been well summed up by still another who had a part in this same inquiry. "It would seem, then, as a result of this examination of the French system, that direct moral instruction, appealing thru the intellect, is unable to stand alone or to take the place of moral training. But, where moral atmosphere can be produced, direct instruction would then be useful in defining, strengthening, and controlling the impression made, and in helping the mental outlook."

As a result of our investigation in Germany, it was found that the teachers, with few exceptions, do not favor separate moral instruction. They contend that "any attempt to teach morality in special lessons will defeat its purpose; that morality cannot be taught; and that the aim of influencing children ethically can be achieved much better thru the whole spirit of the school, and thru ethical teaching in connection with the various subjects." It will, of course, be remembered that in all the schools of Germany, religious lessons are given on a denominational basis, and that great importance is attached to this special instruction.

Religious lessons are given in most of the schools of Switzerland, but systematic moral instruction in only the primary departments. There seems to be a strong indisposition on the part of the teachers to introduce systematic moral instruction in the higher grades. One experienced teacher urged that

moral teaching must be the natural outflow of the teacher's personality. Very careful selection of the school staff seemed to him the vital point.

For lack of time, however, I must turn from foreign shores, and give you a brief summary of another inquiry in which I had a somewhat larger part, and which was carried on much nearer home. But, in passing, it is of interest to note that one of the immediate results of this European investigation was the gathering, last September, in London, of the first International Moral Educational Congress, with official delegates from almost every civilized country on the globe.

For sometime past, a Committee of the National Council of this Association has been at work prosecuting an inquiry on lines similar to those which were followed in Europe, and speaking on behalf of this committee, I want to express our sense of gratitude at the generous assistance which has been extended by teachers, principals, and superintendents of public schools covering a territory from the Atlantic to the Pacific and from the Lakes to the Gulf. Not less than one thousand schools have been brought within the scope of this investigation.

In reply to the question as to the comparative ethical value of different school studies, 58 per cent. give the first place to the group comprising history and literature, literature being somewhat the favorite. As an example of the testimony in respect to these studies, I would quote the following:

1. Perhaps the best discipline for strengthening moral motives within the minds and character of developing children is the study of history; at least it can be made such. There is no subject better adapted to the ethical aim and none so valuable in adding interest and life to the merely formal labors in reading, spelling, and grammar. Factors making for the development of character in young children are the dramatic, picturesque, personal, heroic. While much depends upon the manner of presentation, yet, if all other things are equal, history should have the greatest ethical value among the school studies.

2. No other study in the elementary school compares in ethical value to the study of literature, because human duty, right character and conduct are therein presented with greater detail and analysis than even conduct in the concrete presents. By means of reading, dramatization, memorization, conversation, and the drama, high standards of right in conduct and aims are worked into ideals of life.

Twenty per cent. of the teachers considered that the ethical value of studies differed so slightly and that the method of teaching was so all-important that they refused to make any special selection. As examples of this position, I quote the following:

1. All exact knowledge and thoro study has in itself a moral value and a moral effect on the student. I deem it important, therefore, that all study should be conducted with accuracy and thoroness to get the best moral results. Loose, slipshod work has an immoral effect on the student. I would, therefore, urge that we seek the best moral results in all our schools directly in line of each day's work, and of each pupil's studies.

2. The value of studies varies with individuals and the preference should, I think, be given in any instance to that study in which the individuality of the student counts most. That study is best for any pupil, morally considered, which quickens most his intellectual interest and inspires him to put forth his most earnest effort in the direction of worthy objects to the exclusion of indolence, dissipation of energy, or indulgence in frivolity.

3. The ethical value of a school study is the moral force of the teacher presenting the

subject. The subjects usually referred to as ethical, history and literature, are frequently of less apparent ethical value to a class than scientific or mathematical subjects presented by a teacher of sincerity and moral earnestness.

4. The ethical results of school subjects depend as much, if not more, upon the method of handling them, as they do upon the subject-matter. Of course, each subject has its own method in so far as it determines the way the learner's mind must move. Two third-grade teachers in arithmetic, using same text in same school, all conditions and circumstances similar, save the one of different teachers, got quite different results, not only in arithmetic, but in character.

A	B
Completed assignment in 18 weeks.....	35 weeks
Neat in board work.....	Careless
Systematic on paper.....	Problems scattered over paper
Accurate in processes.....	Less accurate
Rapid in processes.....	Slower
Enjoyed the work.....	Indifferent
Wanted to show what they could do.....	Indifferent
Ashamed of mistakes.....	Took it as a matter of course
Conscious of power and self-control.....	Conscious of inability

These same differences appeared in all work. I have illustrated by arithmetic because it is easier to measure the objective results. These differences in ethical results are due chiefly to the teaching power of the two women.

A small percentage spoke strongly in favor of manual in combination with mental work. As, for instance:

Without doubt the highest ethical value lies in those subjects combining mental and manual effort—moral training, drawing, domestic art and science, laboratory work, business training, etc. I am of the opinion that much of the ethical value of such subjects lies in the fact that they bring the teacher and pupil into closer personal relations because of their demand for individual help.

In reply to the question as to how far, under existing conditions, systematic moral instruction and training were given, 21 per cent. denied that anything systematic along this line was being done; 60 per cent. affirmed that the work was insignificant and perfunctory, while 19 per cent. were willing to consider it as fair. There were absolutely none who felt satisfied with present conditions along these lines.

As an example of the testimony received concerning the general work of moral training, I quote as follows:

Systematic moral training is given in nearly every public school worth the name, and the emphasis is placed on punctuality, industry, truthfulness, and total abstinence from alcohol and tobacco. In some 50 per cent. of the schools or more, some attention is given to personal cleanliness, kindness to others, and kindness to animals.

In regard to the instruction received thru religious exercise, an example of the testimony received is as follows:

Such instruction is received only thru opening exercises held three mornings of the week. The time used is fifteen minutes, sometimes more. The exercises comprise the presentation of moral and religious questions thru readings from the Bible and other religious and ethical works, and brief talks growing out of the life and concrete needs of the school. An attempt is made to unify and solidify the feeling of the school over questions of right and wrong in manners and morals, with fair success. We close with a hymn.

We believe these exercises to be of very great value; and, therefore, they have been continued with the growing power that comes from reverent tradition for thirty years.

Concerning systematic moral instruction at present carried on, I quote as follows:

1. The lower grades of the elementary schools have definite daily instruction given in conduct and morals, the lessons being based upon the stories and fables told or read to the children and upon concrete examples found in everyday life.

2. One period per week (half-hour) should be set aside for lessons on conduct. The thoughts of the child should early be directed to ideas of the proper conduct of life. He should learn the word duty, have his sense of moral obligation aroused. The aim is not intellectual knowledge of some ethical system, but rather that the children should gain appreciation and admiration of great and noble actions and should conceive a disapproval and dislike for what is morally wrong or low. The essential ethical element of a story (the story is suggested) is developed thru questions which appeal to the moral sentiment and judgment of the child and impress the idea that doing right regardless of the personal comfort or advantage is a duty and the measure of human worth. Conduct is divided into "Duties toward Self and Duties toward Others" with several subtopics. "Helps and Hindrances" are named. The work is carried on during the special period, chiefly thru special reading-lessons which are assigned with the ethical element suggested.

A question which elicited lengthy and interested responses was as follows:

Do you think that, in addition to the influence exerted on the pupils by the tone of the school, by the organization of its work and play, and by the personality of the teachers, more should be done to provide systematic moral instruction and training as part of education? If so, should it be (a) tho systematic in plan, almost entirely indirect in method, e. g., given thru the teaching of literature and history; or (b) arranged as part of the religious exercise of the school; or (c) planned in the form of regular lessons, making a graded course of moral instruction on non-theological lines; or is some combination of these methods the more efficacious?

Of those who replied 47 per cent. considered that the personality of the teacher and the tone of the school were together so important in providing moral instruction and training that, at most, there would only be required in addition some indirect method of moral instruction. I quote the following opinions on the subject:

1. The personality of the teacher is paramount in instilling moral tone into her pupils. Her influence, her organization, and her administration of her school leave a marked impression.

2. It is emphatically true, with respect to the earlier years of school life, that everything depends upon the personality of the teacher; in innumerable ways that can never be reduced to formal statements, the teacher may impart to the eager minds of children impressions as to their family, social—in a word—their moral relations, which never will be effaced. Whether this intuitive instruction will take place or not depends entirely upon the teacher. It cannot be brought about by any system of formal preparation or decided by any examinations.

3. Most emphatically and unreservedly, I must say that the ethical and moral training of public-school pupils should be imparted altogether indirectly thru: (1) the tone of the school; (2) the organization of its work and play; (3) the personality of the teacher, who should stand for everything that is true, honest, just, pure, lovely, and of good report.

4. In catching fish, bait is as important as the hook.

5. Personally it seems to me that the best moral instruction is given when it is least

obtrusive. Pupils begin to regard ethics, systematically taught as part of their school curriculum, as something artificial, something good enough for the classroom and for discussions with the teacher, but entirely unnecessary on the playground or in after life.

Only 13 per cent. spoke in favor of a religious exercise. As an example, other than that quoted under another heading, I might give the following:

The lack of reverence is a crying evil of the day. It seems to me highly proper that there should be some recognition of a Supreme Being in our schools. Even Congress is opened with prayer, and I see nothing inconsistent with public-school methods in having the day sessions opened with prayer.

Only 18 per cent. came out strongly in favor of a graded course of moral instruction on non-theological lines. As examples:

1. I must think that some form of regular lessons in a graded course of moral instruction on non-theological lines would be valuable, provided the teacher is perfectly in sympathy with the children and interested in her subject.

2. As a result of experience and observation, both as an individual teacher and also as principal of a city high school, I am convinced that systematic moral instruction and training should be made a part of education in the public schools. This work should be direct as well as indirect. It should include rational non-sectarian religious exercises, the relation of incidents from life, the discussion of wholesome literary and historical themes, and also definite, formal, positive, direct teaching of those precepts and practices and cultivation of those sentiments and emotions that tend toward the refinement of character and the elevation of manhood.

It might be of interest to quote here one of the numerous statements in opposition to religious education, as, for instance:

Religious exercises, even if non-sectarian, should not be conducted in the public schools at any time or season. The danger is near that non-sectarian instruction will become at all times distinctly sectarian. Even by the indirect method of moral instruction thru reading, stories, literature, music, art, history, and geography, the teacher is apt to impart this or that religious notion peculiar to her belief.

In opposition to systematic moral instruction, I quote the following:

1. Regular lessons in a graded course would be productive of much more harm than good. I do not believe moral or religious growth can be arranged on schedule. It must be clinched when the occasion is ripe for it. A child should have systematic religious instruction, but the public schools cannot give it.

2. A graded course of moral instruction would gradually be given by most teachers in a perfunctory way and thus fail in the very object to be accomplished.

There were 16 per cent. of the replies in favor of combining all of the methods mentioned—viz., the indirect, the systematic and direct, and the religious exercise.

A very small number, hardly a fraction of 1 per cent. favored a scheme of denominational instruction, as for instance:

1. Give a period each week to the different religious denominations to give direct dogmatic religious instruction.

2. Let the state and churches unite in an effort to hold "services" or "meetings" in other places than the school building. This might require a readjustment of the time for the opening of the daily sessions of the schools; it would also require more "open churches" but such a compromise would not be doing even a "little wrong" to a "great right."

Replying to the question as to how far the schools succeeded in cultivating a sense of civic responsibility and of duty to the state, 52 per cent. considered that the schools were fairly successful, while 48 per cent. felt that the results were far from satisfactory. As examples of these positions, take the following:

1. As civic pride is the basis of civic duty, I had my teachers, by familiar talks, call the attention of their pupils to the places and buildings made sacred by the struggle for liberty, and to have their pupils visit these buildings and write occasional essays upon the events with which these buildings were associated. Much interest was aroused in this respect as Philadelphia is especially rich in historic associations. Teachers were instructed to require their pupils to commit and recite passages of prose and poetry, containing the expression of patriotic sentiments. A list of such extracts was appended to the course of study in civil government, many of them classic in thought and judgment. In 1893 I introduced the observance of Flag Day into the public schools, which attracted such wide attention that the custom has spread from city to city and from state to state until it has now become well-nigh universal. I also introduced the observance of the anniversary of the landing of William Penn, which is now an annual custom.

2. I fear we have not had much success in cultivating civic responsibility. In my own school I try always to make the children feel the power of their togetherness, to feel a loyalty to the school, and we use all memorial days—by whatever name—to arouse and deepen love of country. I feel strongly that it is a mistake to have the flag floating all the time. The children carelessly do not see it, and have no feeling about it. It seems to me better to float it on occasions and recognize it each time.

3. I think, under careful guidance, that civic responsibility and duty to the state can be taught by making the school a community itself, and by emphasizing the duty of each one of the pupils to this community. Then, when they get into the world, they will see in the life about them something in which their school life has fitted them to take part.

Replying to the question: "What success has attended efforts to interest the elder pupils in social or charitable work?" 60 per cent. reported that little or nothing had been done along this line, while 40 per cent. told of various kinds of effort that seemed successful.

In regard to hindrances to the work of the schools in the formation of character, there was a surprising unanimity of expression as to the failure of the home to fulfill its obligations along this line; 96 per cent. reported as finding difficulty in the development of character by reason of improper home training. As, for instance:

1. We find it a constant struggle in our school work to inculcate feelings of obedience to parents and yet at the same time to help children to rise above a condition of home life and social environment which is most deplorable.

2. A large percentage of moral failures in school results from bad home influences found alike in the homes of the rich, the poor, and the well-to-do.

3. The conditions of home life, especially for the pupils who are brought up in wealthy surroundings, are most unfortunate for the development of the young people of today. Too much is done for our young people if they are to develop a proper sense of responsibility to the community life and a self-reliant spirit—a spirit of initiative.

4. The conditions of home life and social environment hinder much of the work of the school in the formation of character. The homes of the lower tier, where drunkenness, profanity, licentiousness, and vice of every kind are common, where starvation and neglect are not infrequent—such homes are acting in opposition to every good work of the school. But on the other hand, the homes of the well-to-do and the refined are not all the very best

for the formation of noble and strong characters. There is too much of the namby-pamby discipline in such homes. The children act at their own pleasure, and place themselves on the same level as their parents. They have their clubs, their social affairs, their dances; they woo sweet pleasure when they ought to be in dreamland.

Even the 4 per cent. who seemed to be fairly well satisfied could not always speak without some qualifications, as, for instance:

The conditions of home life in this school are as a rule helpful. The patrons are home-owners of the middle class. There is one exception: abnormal attendance at cheap theaters.

The replies indicate that all of the teachers are keenly alive to the effect of physical conditions in reference to the formation of character, and some excellent reports were received as to the work being done along this line; as, for instance:

1. For four months of the present school year we had medical inspection, altho we called it sanitary inspection, by a thoroly trained nurse. This inspection accomplished great good in securing the co-operation of parents toward improving sight and hearing by various operations. It also decreased contagious diseases; in every way contributed much toward the warding-off of diseases and providing better sanitary conditions. To show the character of the work done under sanitary inspection the following is the report submitted for the month of September. (Our total enrollment is about 6,000.)

REPORT OF SANITARY INSPECTOR OF SCHOOLS FOR THE MONTH OF SEPTEMBER, 1907

Defects of vision.....	49
Acute trachoma.....	1
Conjunctivitis.....	1
Blepharitis.....	2
Adenoids.....	15
Chronic bronchitis.....	1
Tuberculosis.....	2
Suppurating ears.....	2
Typhoid fever.....	1
Scarlet fever.....	1
Pediculosis.....	17
Eczema.....	7
Cold sores.....	1
Pruritus.....	1
Impetigo.....	11
Imperfect hearing.....	7
Skin cases without diagnosis.....	10
Mentally deficient, and applications made to the "School for the Feeble Minded".....	1
Recommended for transfer to the "School for the Deaf".....	1
Number of pupils recommended for treatment.....	194
Number of pupils treated.....	129

2. A superintendent reports: "In several schools I have found that nearly every habitual truant had some physical defect."

Asked concerning the size of classes and consequent lack of individual teaching, 90 per cent. of the replies indicated dissatisfaction with the size of the classes, and the amount of clerical work required of the teachers. As, for instance:

1. This is a serious drawback. We have attempted to reduce its pernicious effects by decreasing the amount of class instruction and increasing the amount of individual instruction.

2. Unless some organization (such as the Parents' Association) is formed between the home and the school, it is impossible for the teachers to keep any hold of former or even of past pupils. Too much technical and clerical work required of teachers of today. Too much centralization of management.

3. Over-pressure of clerical and routine work on principals and teachers shuts out the opportunity to follow up the influence gained in the classroom by continuance of interest and friendship. It seems sometimes as tho the days were spent in "paying tithes of mint and anise and cummin and omitting the weightier matters of the law, judgment, mercy, and faith."

4. Either time should be given to teachers, or special agencies formed to keep up connection between schools and parents.

5. A clerk should be employed in each large building. My experience is that if I keep my clerical work up I must neglect visiting my pupils.

Less than 10 per cent. signified anything like satisfaction concerning the matter.

The question was asked whether it would strengthen the moral influence of the school to give more responsibility to the elder pupils in the maintenance of discipline, and to this question 65 per cent. answered in the affirmative and 35 per cent. in the negative.

With almost no exception there was an expression of earnest desire to beautify the school surroundings and to emphasize in every possible way recreation and school games.

As to the value of formal addresses to pupils by teachers and others, 81 per cent. were in favor of this method of inspiring higher ideals, and 19 per cent. were opposed.

Asked as to what encouragement should be given parents to take a personal interest in the school, with a view to closer relations between the school and home, 83 per cent. expressed themselves strongly in favor of parental associations or some such organizations, while 17 per cent. doubted their value, or told of unfortunate experiences in connection with them.

There was no opposition on the part of anyone to school journeys, visits to places of educational interest, vacation schools and holiday camps, when these undertakings could be successfully carried out.

Regarding the organization of old scholars' clubs, alumni associations and the like, 75 per cent. spoke in their favor, and 25 per cent. felt that they were not productive of much good, or else were beyond the range of possibility for the ordinary teacher.

The following question was not universally answered, but seemed to deserve careful consideration from a number:

Should steps be taken to make the continuation classes and night schools more effective in their training for citizenship?

In regard to this I quote as follows:

Such courses would not only fit the students better for the work they are to do, thus enabling them to earn better wages and to raise the standard of life, but it would also be of benefit to the community as they would have a greater earning capacity. In a moral way, it would be of benefit because it would take these young people away from the streets

in the evenings where they learn all kinds of evil and get into lazy and vicious habits, which hurt them all their lives. I believe our present laws should be so amended as to require pupils who leave school before the age of sixteen to take a certain amount of evening work each week up to the age of sixteen, in public or private schools.

As we sum up these reports, taking into our range of vision the schools of this and foreign countries, we note certain facts which stand out boldly and are full of significance.

1. The deep interest which teachers the world over are taking in the problem of moral training thru the agency of the public school.

2. The almost universal opinion that the strongest influence in the development of character is to be found in the personality of the teacher.

3. The agreement on the part of the large majority that every study and every school duty, including the organization of the student body, should be effective in the work of moral training.

4. The hesitation and distrust shown toward systematic moral instruction, based upon a syllabus, wherever this plan has not been tried. (This applies to the greater part of the schools.) On the other hand, the universally favorable attitude of those teachers who have had experience in this method of instruction.

5. The general agreement that direct moral instruction, if it be timely and wise, is of great ethical value.

6. The high regard shown for Bible lessons and religious exercises by those who make use of them, and the intense opposition expressed by those who are unaccustomed to their use.

7. As a corollary of the preceding, the marked tendency on the part of all teachers to be conservative, to believe in their own methods, and to doubt the value of anything different.

8. The general condemnation of the American home and social life as a hindrance to the teacher in the development of student character.

What then shall be our conclusion of the whole matter? This, perhaps: The problem of moral education, whose far-reaching importance no one can overestimate, demands for its wise solution an awakened church, inspiring with religious ideals the souls of its youth; unselfish homes, consecrated to their God-given mission of caring for the children; and last, but not least, the ever-present public school, whose corporate life, courses of study, student organizations, and physical surroundings shall each and all play their silent though well-planned part in the development of moral character, and whose teaching force, with minds open to conviction, shall serve in love, in justice, in faith in things unseen, in reverent devotion to their high calling, and in conscious recognition of the tremendous power for moral training which is ever active thru the personality of the teacher.

SOME EXPERIMENTS IN MORAL EDUCATION

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Among the memorabilia preserved at the Elmira Reformatory is a letter from a convict to the director which reads: "Please let me join the class in ethics. I think ethics is my weak point." If by ethics we mean not conduct, as perhaps our convict did, but reasoned thought upon the issues of life, then decidedly ethics is the weak point of the school curriculum of the United States. This is not because of any want of interest in the subject on the part of the leaders in education, at least during the past half-decade. We are all coming to recognize more and more that our schools must train directly for life; that character is the most important thing in the world; and that mere intellectual training does not necessarily have any considerable moral influence, and in fact often results in the grafting upon the wolf of the qualities of the fox. We are beginning to lose, also, some of our smug self-satisfaction at the moralizing agencies which we already employ. We have been wont in the past to point with a smile of pride to the influence of the discipline of the school, and of the character of the teacher. These, especially the latter, we shall indeed never cease to value as not merely of the highest importance in themselves, but as the foundation for everything else that we can do. But a more careful observation and the application of higher standards are showing us that these things are not enough. For in spite of them the output of the schools is, from the moral point of view, usually mediocre and sometimes worse. These facts we teachers are beginning to recognize, and we are vaguely feeling that we must bestir ourselves.

We vaguely feel that we must bestir ourselves, yet almost nothing is accomplished. Why? I suppose it is because we do not see our way, we do not know exactly what to do, and are afraid of doing the wrong thing. In consequence we do nothing, falling back indolently upon the example of the teacher, and the word dropped incidentally during the course of a recitation. Excellent, and indeed indispensable, these things, I repeat, to avoid being misunderstood, but, I insist, hopelessly inadequate to the seriousness of the conditions confronting us.

In view of this situation I wish to ask your attention for a few minutes this evening to one or two devices for moral education that are so simple that it will be self-evident that they can be used, and to one or two others whose practicability and value have been demonstrated by experience. And I want to appeal to you to introduce some one of these into your schools; or, if you have worked out something that seems better to you, to try that even if it does not appear to you as beyond all criticism. Let us not wait until we can see the entire length of the road before us; let us not stop to argue with our own fears or the skepticism of anyone else; let us settle the problem of the possibility of systematic moral training and instruction by putting it to the only

possible test, the test of experience. There is indeed a time for thought and discussion. We do not want to be like the Irishman riding by furiously on horseback, who didn't know where he was going, and only knew he was going at a terrible pace. But the time has come when bare speculation on this subject has accomplished about all it can; and what we have to do now is to get to work. To work, then, I say. And since in the multitude of counselors there is wisdom, let those of you who are willing to join the ranks of the workers make arrangements to meet around a table at least once a year, say at the meetings of the state teachers' associations, to compare, and perhaps, thru a secretary, record your experiences. Soon means will be found for a broader comparison and synthesis, perhaps at the meetings of the National Association, and thru these means and thru reports, thru journal articles and otherwise, a system of moral education, truly national in scope and character, will arise. It will be national in character because it will not be forced upon an unprepared people from above by some minister of education, as in France. It will be the product of the minds of those who are in close contact with the people whom they are training and instructing. Hence, whatever blunders may be made at first, in the end it will speak directly and unequivocally to the national conscience.

What, then, shall we do, you ask? I answer that there is so much which can be done that you can select one out of several radically different methods, and then, as time goes on, you can introduce another and another if you wish, until you are employing all the varied agencies which are requisite for the attainment of the best results. If you are of the active type yourself you will find it easiest to begin by training your pupils in self-control, obedience to the common will, and mutual helpfulness by means of one of several different systems of pupil self-government. There is the school city, for instance, which has recently been described in several magazines. Better still, I think, is the system of class-prefects or tribunes. One boy and one girl are chosen by each class from its own membership, and these are responsible for the order and decorum of the class, and all of them collectively, for the order and decorum of the school as a whole, and that, not merely during the recitation period, but on the playground, and even in the hours of going to and coming from school. But what is even more important, this system can be used by a wise principal for developing a spirit of mutual helpfulness. Remarkable results have been obtained in this way. For example, the life of one school which I know where this work was for several years carried on was as unlike that of the public school which I attended in my youth—a school community which was probably as good as the average, but which was a hotbed of almost unbridled individualism—the one, I say, was as different from the other as the material civilization of today is different from that of a generation ago. This method of character-building can be employed successfully with pupils from the sixth grammar grade on thru the senior class of the high school.

But good as this is, it is not enough. In order to get the best results it

must be supplemented by direct and systematic work in the classroom. The first method I would suggest is to bring your pupils into contact with lives and movements that will awaken by contagion aspirations for the best things. Arrange that there shall be a course in your school in which, once or twice a week, the biographies of the heroes of our national life shall be studied. Make your pupils acquainted with Franklin, Washington, Garrison, Robert E. Lee, and Lincoln; and, of our own generation, with such men as Jacob A. Riis and Walter Reed, who sacrificed his life in demonstrating the relation of the mosquito to the spread of yellow fever. Good biographies for young people are rare. For this reason I have made a bibliography of the subject with the help of one of the chief authorities in the United States on young people's literature. I shall be glad to send it to any teacher who cares to apply for it. The class may be conducted by having the pupil read a paper on a portion of the life of the person selected, in which everything that can be found in an encyclopedia will be rigorously excluded, and an attempt will be made to get a clean-cut picture of the man's character and his contribution to the higher life of his time. Of many of these men there exists a brief biography; of the lives of the remainder sketches can be found in one place or another. These should be read by all members of the class, so that the presentation of the paper may be followed by a general discussion. In these days of political and industrial corruption, what a breath of mountain air to learn of the reception accorded by Franklin, Washington, and the other Revolutionary leaders, to the repeated corrupt overtures made to them in the early years of the American Revolution by the British Government! In the end they could have had anything they chose to demand; but they stood firm like a rock. Henry IV of France called Plutarch his conscience; and we Americans have in the annals of our own country our own Plutarch, a record of men and women of the same race with ourselves, going and coming in the same kind of a world, whose lives can thrill us and our children like a trumpet call.

Such a course might well be supplemented by a study of the movements that are going on about us to make the world a better place to live in, and man a better person to live with. In order to give human interest you may identify each with some person with whom it is especially connected. Thus the movement for governmental control of corporations may be identified with ex-President Roosevelt; the work for our colonies, especially the Philippines, with President Taft; the conservation of our national resources with Mr. Pinchot; the fight against child labor with Mrs. Florence Kelley; and the reform of juvenile delinquents with Judge Lindsey. These are mentioned merely as a suggestion, for there are many more. For materials send your pupils to the magazines, among which stand pre-eminent for such purposes the *World's Work*, the *Outlook*, or the *Independent*, and the *Survey*, the journal which till very recently bore the misleading, because too narrow, title, *Charities and the Commons*. This last is published by the Charity Organization Society of New York.

Such subjects, as will be obvious, are adapted both to the upper classes of the grades and to the high school. But they should be supplemented by a very different kind of work—a course in which the pupil shall be led to reflect systematically upon the problems of the conduct of life. Courses of this kind are courses in moral instruction in the narrowest sense of that term. It is of these that I wish now to speak. The aim of a course in moral instruction is not primarily to teach the pupil what conduct is right and what is wrong. This is of some importance and should not be neglected. It is well, for instance, for the pupil to see that a man may lie by his actions as well as by his words, and that he may lie by keeping silence as well as by speaking, and thus play the traitor to his friend when he has never opened his mouth or even shrugged his shoulders. These things, I say, are useful, and have their place. But the place is a subordinate one. The primary aim we must keep in view is to make our pupils feel the claims upon them of the right forms of conduct, the evil and hatefulness of the wrong forms. And this can be done principally by leading them to see and to realize the effects, direct and indirect, of the right and of the wrong course of action respectively, the effects upon their own happiness and their own character, and upon the happiness and character of others. In other words, the primary end is the development of moral thoughtfulness. Given this moral thoughtfulness, with the moral enthusiasm which it tends to inspire, let this enthusiasm be first quickened by the study of the biographies of good men, let it ever find an outlet in action by means of a system of self-government in which the pupil learns to practice the self-control and helpfulness to his fellows about which he reads and studies—let these things become general, and I believe in a generation we shall see one of the greatest moral uplifts this country has ever known.

This work in moral instruction, as experience seems to show, can be introduced with profit into the grades. Mr. F. J. Gould's *Child's Book of Moral Lessons*, published by the Moral Instruction League of London, has been used apparently with much success among the younger children in England, and his lessons seem to me equally well adapted to the needs of American girls and boys. For high-school pupils there are a number of admirable manuals that could be used with great advantage; for example, the *Practical Ethics* of President Hyde, of Bowdoin, published by Henry Holt & Co., and *Character Building* by Mr. E. T. Jackson, published by Houghton, Mifflin & Co. These books, I repeat, are excellent for high-school work; but they seem neither to give the teacher, especially the beginner in this field, quite enough material to work with, nor to supply him with sufficiently specific directions as to how to proceed. For this reason and other reasons I have prepared a *Manual of Moral Instruction* for the upper classes of the high-school which aims to rectify these seeming defects, and at the same time takes up the subject from a somewhat different point of view. By the generosity of the regents of the University of Wisconsin, who have published this manual

for me, I am able to present a copy of it to every member of this Association who cares to apply for it.

The course herein described was given last semester in the Menomonie, (Wis.) High School, under the direction of the principal, Mr. G. A. Works. Offered as an extra study, entirely without credit toward graduation, it was taken by forty-two out of the forty-five members of the senior class. All of these continued it to its conclusion, and most of them did gladly a considerable amount of outside work in connection with it. This seems to show that it represented something which the students felt they needed. The same conclusion is fairly deducible from the fact that from the middle of the semester the members of the junior class kept coming to the principal to inquire whether the course was to be given the following year. The three teachers who took charge of the three divisions into which the class was divided agreed that the work not merely proved interesting to their pupils but was very distinctly profitable also. Such, as I understand, was the unanimous opinion of the pupils themselves, many of whom regarded it as among the most valuable of the courses offered by the school. The fruits of the work were seen at once, according to the testimony of the teachers, in better order and a more serious attitude toward their studies in every class of which these students were members. I do not say these things to recommend my own particular program. Equally good results might well have been obtained by the use of the books whose names I have mentioned above. I tell this experience in order to show that the teacher who undertakes to discuss systematically with his pupils the serious problems of life is offering them that for which their souls thirst, a thirst which no stream of Latin or mathematics or ancient history can quench, and in the presence of which much of what we teach seems little better than a mockery.

The character of the course can be seen by an examination of the manuals which are at your disposal, and requires therefore but a few words of explanation. Its subject-matter is success. The advantage of approaching a problem of conduct thru this path is, obviously, that the interest and attention of the pupil can in this way be easily awakened and sustained. The first half deals with the means to success, using success in its ordinary conventional signification. It does not confine itself at all to the moral qualities, but begins with the management of the attention and the memory, and the means of educating the powers of imagery. It then points out the relation of intellectual and physical vigor and thereupon passes to some of the moral qualities necessary to success. In the second part the question considered is wherein true success in life consists. The transition between the two parts is made by a study of the lives of certain persons who had wealth, power, and social position, and yet were profoundly unhappy. The method of procedure which is presupposed throughout is that of awakening the activity of the pupils' mind, compelling them to work out the solution of their problems, to take each step for themselves, the teacher serving merely as guide. The device employed to attain this end is,

in the main, sets of questions which are to be mimeographed and put into the hands of the pupils. They are supplemented by abundant references to the literature of the subject. The material which the teacher is to have in mind in conducting the course is supplied in the form of copious notes. The point of view which pervades the whole is that genuine success has never to be purchased at the expense of the rights of others; that to a view which penetrates sufficiently below the surface, the mighty organism of which we are members is far more harmoniously constructed than we in our short-sightedness often suppose; that loyalty to the demands of our best selves and devotion to others alike call for precisely those lines of conduct which the most enlightened and far-seeing conscience approves. The detailed perception and realization of this fact cannot but liberate the forces of steadfastness, honor, and generosity, which lie dormant in so many young people, half-asphyxiated in the atmosphere of convention, of suspicion, of timid egoism, in which a great part of American society lies steeped. The liberation of these forces should appeal to the teacher as the noblest and most inspiring work to which he can set his hand.

CHILDHOOD AND MORALITY

BEN B. LINDSEY, JUDGE OF THE JUVENILE COURT, DENVER, COLO.

In dealing with the morals of the child, it has never been the purpose of the state to usurp the function of the home, the school, or the church; but under our form of government, it always has been the duty of the state to deal with certain child offenders. Under the common law accepted in many of the states of the Union with some modifications by statute, a child after the age of seven might be guilty of crime; and when he violated the law he was dealt with by the state, under the same court procedure as in the case of adult criminals. One of the first protests against this absurdity was made by a schoolmaster in England in a treatise on criminal jurisprudence and the actual working of the penal code of laws, published in London in 1833. Please observe this description of trials of boys in the Old Bailey Court, the leading criminal court of London:

The Old Bailey Court, in proportion to the numbers, as often sentenced boys as men to transportation for fourteen years and life. Nothing can be more absurd than the practice of passing sentence of death on boys under fourteen years of age for petty offenses, I have known five in one session in this awful situation; one for stealing a comb almost valueless, two for a child's sixpenny story-book, another for a man's stock, and the fifth for pawning his mother's shawl. In four of these cases the boys put their hands through a broken pane of glass in a shop-window, and stole the articles for which they were sentenced to death, and subsequently transported for life. This act, in legal technicality, is housebreaking. The law presumes they break the glass and it is probable in most instances they do so. In two of the cases here named, however, the prosecutrix's daughter told me there was only a piece of brown paper to supply the place of that which once had been glass. In the latter case, the unfortunate mother caused her son to be apprehended, in the hopes of persuading the magistrate to recommend him to the Refuge for the Destitute, or some other charitable institution. She, however, in the course of her examination, said she was

from home, and that the house was locked up at the time of the shawl being taken, which was afterwards found at a pawnbroker's. This made it housebreaking; and, in spite of all the mother's efforts, he was condemned to death. He is now in the penitentiary. The judges who award the punishments at the Old Bailey appear to me as if they were under the influence of sudden impulses of severity, there being at no time any regular system to be recognized in their proceedings. This the prisoners know, and speculate on, particularly the boys (p. 300).

Within a hundred years boys, it would seem, have been hanged for what now is denominated petty larceny, and it is not much beyond this period when they were beheaded and their heads stuck upon gibbets as the gruesome reminder of the punishment in store for thieves; and even with two hundred offenses in England at that period punishable by death, many of which today are looked upon as the petty offenses, crime increased. It was such protests as that of the old schoolmaster that caused considerate home secretaries to commute such sentences to imprisonment for life or a period of years in the penitentiary; but to one at all familiar with the degradation that came to childhood thru the old methods of the jails, this consideration might be questionable. The state that sent the child out into life with his soul seared and his body debauched, as thru jails was so often the case, was just as culpable as the state that choked the child to death upon the theory that it was choking crime. The state had not waked up to the difference between evil and the child; it had not waked up to the truth the Master taught, that evil is overcome with good, not with the stripe, the iron bar, or the degrading lash, much less the hangman's noose. The federal government as yet has not provided us with very reliable statistics as to the number of children dealt with by police offices and courts. And it is to be hoped that a federal children's bureau will be established, to gather, specialize, and focus statistics and facts upon this important subject.

I am satisfied, however, from special inquiry and investigation in sixty of the large cities and towns of the nation, that we do not overestimate when we place the number of children dealt with by police and court officials every year as at least one hundred thousand. It might reach two hundred thousand.

As the ages of dependents and delinquents are now being measured in most of the states up to the eighteenth year, it will be seen that within the period of delinquency and dependency, as fixed by the laws of the states, the courts of the nation are called upon within this period of the child's life to deal with nearly two million children under this minimum estimate, and nearly four million under the maximum estimate.

But counting the number even at a million, it should be sufficient to emphasize the responsibility of the state for the child. Until some very material economic changes are brought about, this number is more likely to increase than to decrease. Courts alone will not stop the increase. They are not cure-alls. Children's courts can do much, but whatever they do must be done largely thru the home, the school, and the church. They must bring into the life of the child the influences that come from these institutions responsible

for the child, and therefore, the appeal of the state must be to the home, the school, and the church. In dealing with his morals, instead of taking the child out of these three institutions of his life and putting him in jail, he must be placed under those influences that are as near akin to them as it is possible for the state to devise. The state's effort in this direction may be seen in the development of the industrial schools, training schools, parental schools, detention-home schools, the probation system, and that marvelous revolution in the law which came upon us about ten years ago in Colorado and in Illinois, when the child for the first time in the history of jurisprudence was no longer regarded by the state as a criminal, but rather as its ward; no longer looked upon as the malefactor to be hung or degraded thru the mire and filth of jails and criminal courts, but rather, as in the language of our own statute, "one to be aided, assisted, encouraged, educated;" in a word, to be saved to good citizenship, to be redeemed as the most valuable asset of the state. Therefore, since the appeal of the state must be principally to the home and the school, the work must be done principally by and thru the home and the school. It is unnecessary to recount the splendid work that is being done. We are not here to pat ourselves on the back with an inventory of the things we have done, but rather to point out those things we can do, which we have not done: to discover, if we can, those faults, those mistakes that are bound to be a part of any work, however sincere and however helpful. I am not sure I can do that. I can perhaps point to some experiences that seem to me to present some defects, some mistakes of the home and school.

The average young child is frankly, innocently unmoral. He takes what he wants, if he can get it, not because he is an embryonic thief, but because this is nature; not human nature, but nature itself, and nature is seldom altruistic. The normal child is merely a healthy little animal, to start with, and his morals develop, grow with his growth and strengthen with his strength only when they are guided in the right direction. The most demoralizing agency in childhood is fear, and it may be found at the bottom of most of the immorality among children. The child lies because he is afraid to tell the truth; he may be afraid of a whipping, of one parent or the other, of a bigger boy, of the teacher, of some far-off abstraction called God, a remoter abstraction called the devil, or a fearfully imminent reality called the bogie man, said to haunt all dark places. In any event, no matter what it is he fears, it is fear that makes him a liar, and this opens the way for all the other derelictions of youth, and age too, for that matter. I lay emphasis upon this because the habit of truth-telling and the attitude of fearlessness are generally either dominant or lacking in the child before he enters the public school. The school is what the children make it, moral, unmoral, or immoral, according to the homes they come from, quite as much as the children are a product of the school. It is very lovely to think of childhood as the age of innocence and uncontaminated virtue, but it is also very dangerous; for childhood left to follow its own devices, its own untaught impulses, its purely animal emotions,

is very far from that ideal that we like to believe it. Our morals are very largely a matter of relationship to the life around us. Thou shalt not bear false witness, thou shalt not kill, thou shalt not follow a multitude to do evil, thou shalt not oppress a stranger, thou shalt not covet—these are the temptations that come with community life, and the boy and girl who go to school are assailed on all sides as never before. It is not to be wondered at that they fail now and then.

Ask the average boy in the Juvenile Court why he will not steal again and nine times out of ten he will give you precisely the same answer: "I will get in jail." To my mind, that is an indictment by the child of the teaching in the home and the school. The child has learned his lesson wrong, a lesson unconsciously taught by parent or teacher: "Steal all you can, cheat all you can, so long as you don't get caught." It is the lesson he carries with him thru life into the commercial and business world, and the lesson that develops many of our most dangerous criminals in the world of business and finance. Their intelligence (or, if it fails, the same intelligence of shrewd lawyers ever held in reserve) makes them masters of the art of not getting caught, and like the delinquent child, getting what they want lawfully, if they can; lawlessly, if they must.

One of our difficulties is to overcome this careless teaching and to teach the child to do right because it is right; because he hurts himself when he does wrong and because he owes it to himself to do right; because it is weak and cowardly to do wrong and because it is strong and brave to do right. The threat of a mother or teacher to turn the child over to the policeman or jailer, has, in my judgment, started as many criminal careers as any mistake ever made. It is well to hold up the consequences of evil-doing, but in doing this the undeveloped mind of the child has too often accepted it as the real motive or the only motive for righteous conduct.

I also wish to contend for a different definition of the sins of childhood. Ignorance of the law cannot be pleaded as an excuse by man, but how is a child to know until he is taught, and why condemn thoughtlessness and ignorance in the same terms which we bestow upon hardened vice? We shall deal more justly with erring youth, and more wisely with the great problem of zig-zag human nature if we look upon the cardinal virtues as an achievement, rather than a heritage lost early in life.

Perhaps the most common offenses against morality among school children may be listed as follows: disobedience, swearing, use of tobacco, lying, stealing, and personal impurity in thought and action. After eight years of active personal work, gaining the confidence and getting the opinions of hundreds, and I would almost say thousands, of boys and many girls, I would not dare confirm their judgment as to the extent of these delinquencies. For instance, I have frequently addressed the question to boys of the intelligent type and an age when their judgment is fairly worthy of confidence, as to the number of their companions who were guilty of the offenses named. Their answers

in 90 per cent. of the cases were about like this: "Nearly all the kids I know swear." "Most all the fellows will lie if they think there is no proof and they can get out of it.that way." "Over half of the kids in our school will steal if they get a chance and they think they won't get caught." "All the kids I know talk bad things, tell dirty stories, and boast about things that most of them never did, but they think it is smart to say they did and some kids I know have."

Making due allowances for the exaggeration of children, and especially boys apprehended for delinquency, who are inclined to exaggerate the extent of similar delinquency among others, and over against this taking the opinion of some of the best boys I ever knew who have never been guilty of any of these offenses, but whose life among their companions makes them reliable witnesses—infinitely more so than their parents or teachers—I am inclined to think that if we tried the morality of children in the public schools in this country by this test—namely: Is the child disobedient, does he swear, does he lie, does he steal, is he impure in word, thought, or act—the results would be so startling that I have always seriously doubted the wisdom of its public discussion, except in a most guarded and careful way.

Again, however distressing it may seem, I am not disposed to believe the results as bad as the admission of technical moral delinquencies would imply. How many men can say they passed thru their boyhood without being technically guilty of any one of these offenses? That is a part of the weakness of human nature. Its occurrence and correction is a part of the method of strengthening and building character; but of course there is a limit. If any one of these misdeeds becomes chronic the state is certainly preparing to reap a criminal rather than a good citizen, and in the home, the school, the Sunday school, and in our dealings with childhood and youth as citizens—for our example is constantly affecting some sensitive soul—we cannot be too careful in our teaching and dealing with children. Of course, I do not mean to justify even an occasional lapse or violation of the moral code in the derelictions which are the most common among children, but I do say it is a very exceptional child who passes thru the period of childhood and adolescence without an occasional lapse in some and often all the respects referred to. When I consider the children themselves I do not believe their moral condition as alarming as it might seem, and yet it is alarming enough not only to justify but demand a great deal more of our attention than I believe we are inclined to give the subject.

After all, the protection of the child against immorality in his life depends upon the strength of his character. Character is founded upon conscience, and conscience comes from the development of the human heart; therefore, the necessity for moral and religious training, which is the very basis of all our principal education and the most important part of it. Thus to solve these difficulties of childhood and youth we must fall back upon the home, the school, and the church, and in these recent times of congested cities I

would add another factor, the neighborhood itself. We have four factors in the development of character and childhood which I should put in this order: (1) the home; (2) the church; (3) the school; (4) the neighborhood.

Of course, the home means the parents, the church means the Word of God, or other ethical training. It would be well if we had such a perfect condition of society that we could depend principally upon the home and the church for this moral training; but how is that possible when there are hundreds of thousands of children without homes who are left to shift for themselves because of the ignorance and indifference of parents or thru some economic, social, or political condition? Divorce, desertion, drink, ignorance, poverty, crime, and evil neighborhoods, where lawlessness flourishes thru bad politics, provide an example and environment that is a constant source of evil to child-life. It is hopeless to expect these children to receive instruction from the natural source—father and mother. For similar reasons they are without religion or church influence.

Now the state is in certain cases as much responsible for the moral, physical, and mental development of the child as the parent. Where there is no parent, or where the parents are careless or helpless or unable to discharge their functions, it becomes the duty of the state to step in. Thus we have compulsory school laws, child-labor laws, probate-court laws, juvenile-court laws, non-support laws, contributory-delinquent laws, and so forth. All of these laws simply represent the effort of the state to perform its duty toward the child, just as the clothing and fitting of a child in the home and his being sent to church, to Sabbath school, or to the public school, represent the effort of the parent to do precisely the same thing. The state being burdened with parental responsibility under the law of *parens patriae*, must take a hand in the development of the child; and since the most important factor in its development is its moral character, the state cannot shirk its responsibility in this respect.

The fact that the school must necessarily and properly be non-sectarian has made the burden of the state one of considerable difficulty, and to harmonize its attitude toward the child with the recognized rights of parents is one of the great problems of our modern civilization. The fact that most of our children have good homes and some church affiliation does not justify us in objecting to the school making the basis of all its education moral training; but because of the difficulties referred to, the school is deficient in the most important feature of all education, and in thousands of cases is merely grinding out citizens who are more dangerous because they are more intelligent. Intelligence without moral character, intelligence without conscience, is infinitely more a menace to the state than ignorance without character or conscience. The methods of the latter are crude and revolting and generally easily corrected and guarded against. The methods of the former are shrewd, cunning, insidious, and deceiving.

In the nine years that I have been the judge of a court, I say without hesita-

tion that the most dangerous crimes against the state have come not from the ordinary or ignorant criminal, thief, "stick-up," burglar, or murderer, but from men from the high schools and universities, who thru the cunning of criminal intelligence have committed monstrous crimes against their country and set in motion a wave of evil that has sorely afflicted the home in thousands of cases and contributed to the debauchery of childhood.

Crimes of this kind could not exist if men and women were brought up according to the golden rule of doing as they would be done by. It is their absolute selfishness that makes them disregard everyone else in their scramble for place or wealth. The home that knows no touch of altruism is responsible for them, and the condition of society that worships success, no matter how it has been achieved, delights to honor them. When it comes to the power of an example, one "malefactor of wealth" is ten times as productive of evil as ninety and nine ordinary prisoners doing time in the penitentiary.

I believe it is the duty of the school, and especially presidents of universities, who are leaders in the thought of the nation, to point out such criminals in order that the youth of the nation may abhor rather than wish to emulate them, as many of them wish to do.

As that man is dangerous who would raise up hate as a champion of his cause, so is that man more dangerous when in the interest of lawless business he suppresses the truth and sneers at those who dare to tell it. The apologies of pious plutogogues (which includes some college presidents) for the lawlessness of plutocrats, whose bounties they have shared, are doing more in this country to inflame the passions of the envious, the ignorant, and debased, and to raise up anarchy than all the sayings of all the demagogues and Emma Goldmans. If the vile monster of anarchy flames and hisses it is largely because of the injustice and evil that men do.

Because industrial wealth deserves its honors should it not be more ashamed of its crimes? Men have a right to make money honestly. But shall the right to "special privileges" and monopoly of the people's natural resources carry with it a right to corrupt men, women, and children, to poison the sources of democracy and endanger our freedom and our liberties, the administration of our laws, and all the institutions of the Republic?

Do not those, conscious or unconscious, who thus lend themselves to the defense of lawlessness, become the assassins of human character; become the despoilers of manhood and the exalters of an unrighteousness that, of all places, should be pointed out and condemned in the universities and the schools? Should it not be known to those who are to take the reins of government from our hands? Should donations of money, however great, or advantages, however needful, deter us from telling the truth to youth? Should we not warn them of treachery? Should we not sanely dwell upon the ominous shock it portends? As Chief Justice Ryan, of Wisconsin, said over thirty years ago, should we not "point out their colors, teach them the sound of their trumpets, that they be not deceived; that they may know of the

preparation in their camps?" Shall institutions of learning be faithful to Mammon or faithful to God; faithful to the Republic or faithful to its despoilers?

Just as some of the courageous college professors and university presidents are strengthening the morals of the youth of the nation in fearlessly pointing out evil in high places regardless of consequences, so among the greatest debauchers of the morals of the youth of this nation are those college presidents who become apologists for rich criminals. This is very seldom direct and open, tho it has been amazingly so in a few instances. It is often veiled in addresses abounding in high platitudes warning us against the radical and the anarchist and insisting that we should be "let alone," should be "safe and sane" or "smile and push;" constantly pointing out the dangers of being envious of the rich, as tho the American people were generally given to that monstrous crime. It is one of the most effectual schemes of intellectual sissies who are afraid to attack evil lest it involve them in a row with the leader of the bad gang, which they are forced to follow. Rebellion might bring a smash in the face with the withdrawal of financial support.

From ten years' experience in seeing the government of a city and state corrupted and democracy murdered, and knowing that the conditions in one state are not different from those in other states where the same temptations exist to steal public property and trample upon justice to men and women, I am profoundly convinced that many college presidents and college professors know little about the real government of their country. I know some street boys and any number of saloon-keepers and gamblers who could tell them more truth about it than they know. I think one of the greatest things that could be done for some universities in this country would be to get some ward boss to deliver a few truthful lectures to their presidents upon how their country is governed; they could tell who are the real criminals; they could tell them who are responsible for the debauchery of the home and the ruin of the child that comes thru political corruption, involving always a partnership with vice, and thru the corruption of courts and legislatures the withholding of that economic justice that is the chief weakening of the American home, and from which the child suffers most both physically and morally. I know positively from actual experience and personal knowledge that some of the men directly or by innuendo thus held up as models to the youth of the nation are the men who debauch city councils or legislatures in order to defeat laws for the just protection of men and women, and, profiting by it, become generous contributors or maintainers of the institutions presided over by intellectual sissies who are too incompetent, too ignorant, or too cowardly to tell the truth.

The bad example furnished by business men and public officials is a serious cause of youthful delinquency. A messenger boy confided to me that he went to a well-known club one night, and there received a message from a "prominent" citizen, which took him to a disreputable resort, and

that he went from there with a bottle of champagne to another dissolute place. I knew the man the boy described. He violated every duty toward the child that his education in the home, the school, and the church had ever taught him to respect.

I tried another boy who was accused by a wholesale jeweler of stealing watches. The boy, about sixteen years of age, had passed the second year in the high school. When I got his confidence I first learned his habits, for bad habits make weak characters and weak characters cannot resist temptation to lie, steal, and lead immoral lives, however much their intelligence may enable them to make money or succeed in other directions. He had been very successful in securing certain jewelry from his employer and disposed of it without detection for a long time. He had been a messenger boy. He was perfectly aware that men holding prominent positions in the churches and posing as good citizens were found by him in places that belied all of their professions. He told me frankly of the habits of his life without any apparent shame and indeed endeavored to justify his sins. He said that more than half of the boys he knew were guilty of similar indiscretions and that, of course, included his chums in the high school. He assured me that the police did not interfere with boys frequenting disreputable places in spite of the law, but he said as tho imparting information, "The cops do not put us out because there is a graft in it—they stand in with those people, and as long as they get a rake-off they do not stop the kids doing what they please." He insisted that the "fourteen K." stamped in the watch case was a fraud and that they were plated brass, and the "22 J. M." stamped in the works was another fraud, since it was not a genuine 22-jewel movement as it purported to be. This was put on the watches in order to "fool the suckers in the country" who purchased what he called "fake jewelry" at ten times its real value. He also confided to me that there was burglary insurance upon this sort of property and upon several occasions the amount of insurance collected for loss was much in excess of the value of the jewelry.

Again, I recall a heartbroken mother who came to me in tears telling me that her little Billie had been arrested for stealing a bicycle. She insisted that the boy was looked after and such conduct was unaccountable upon the theory of home neglect or training. The boy stood well in his classes at school. He naturally associated with the boys in the neighborhood and the leader of his gang had been sent by his father, a faro-dealer and gambler, to the saloon for liquor at various times. On a Sunday afternoon when the gang was together, the leader having been sent by his father to the saloon for a flask of whiskey, he tarried on the way home with the boys assembled in the alley, and out of pure banter, perhaps, he "double-dared" any fellow to take a "swig" out of the bottle; and since no boy likes to be double-dared, of course, everybody took a drink. The crowd became more or less intoxicated for one dare led to another, and one or two drinks is enough to affect the mind of a twelve-year-old child. The boys who were not affected declared

that the liquor burned them so that they were unable to swallow it. In leaving the alley it was proposed that they steal the bicycle on the curb and sell it for money to get drinks more acceptable to the gang. When they appropriated the bicycle the policeman stepped into the case for the first time—tho it was against the law for the boy to enter a saloon or purchase liquor—and arrested them for the theft of the wheel. All of these children were guilty of immorality and were regular attendants at the public school.

When we begin to place the responsibility we must divide it between the public official who tolerated lawlessness, the home and the school that had failed to strengthen the characters of the boys so as to resist temptation, and the business man who set the bad example. Of course, the chief difficulty was in the home and the failure of the school to make good the shortcomings of the home. The Master taught us to pray, "Lead us not into temptation but deliver us from evil." The public official by his own action certainly violated that injunction, which of course did not mean that the mere leading into temptation was an excuse for crime, for the prayer was also an admission of the great inherent character of human nature that needs to be strengthened against evil by moral training—thru the heart and conscience. In all of these cases, had the boys been properly trained in the home or the school they would have resisted temptation and have avoided evil. None of us is so strong but that we fall into evil at some time in our lives. The extent of our sin depends upon the strength of our character.

It is a truism to say that the hope of the nation is in the home and the school; and while the school cannot supply the deficiencies of the home, it can, if it fulfils its functions, do much to overcome them. This does not mean that parents shall shirk and put the responsibility upon the school; but because of the defects in our modern society the school must recognize its responsibility and endeavor to perform its duty as a developer of the home. Our contributory-delinquent laws enable the schools and the public officials to compel the parent to do his duty, and the probation courts will assist many a helpless home that is unable to perform its full mission; but the principal aid in such cases must come from the school.

Personal influence comes thru personal contact, and since personal influence is perhaps the most powerful factor in moral or immoral development, there comes a grave responsibility to the teacher. With this responsibility comes also a great opportunity that from the standpoint of service to mankind ought to be welcome, since there is no class of our citizens, not even parents themselves, who can do or are doing more to mold the character of the coming generations than the teachers in the schools. I believe that to gain the affection and confidence of the child is the first step toward strengthening his moral character. Nothing helps more than little talks with the children. Sometimes these talks are better delivered in private and sometimes when the children are together. I believe it is a good deal more important in the grammar grade to have frequent talks upon such subjects than to teach

grammar, arithmetic, or geography. Among the subjects I would recommend would be: "Our Duties to Each Other;" "The Absurdity of Hate;" "Truthfulness;" "About Quarreling;" "Usefulness;" "Gentleness and Kindness, Mercy and Charity;" "Money and Manhood;" "Evil Associations;" "Evil Thoughts;" "Evil Talk;" "Jealousy and Envy;" "I Forgot;" "What Is Success?" "The Man Who Serves and the Man Who Makes Money;" "Public Service;" "A Pure Life."

Children will not tire of these subjects, if they are properly presented. On the contrary, there is nothing that interests them so much and nothing that contributes more to their real education. On quarreling I would take some actual experience, describe it, and get the boys interested and then have them join in the discussion as to the duty of each boy involved, with praise for the moral courage necessary upon such occasions. Let the boys know that you understand what they talk about, with some homely illustration. Describe about what they do and what they say. Discuss their duty to each other and the varying conditions; when to fight and when not to fight, and in the vernacular of the street, when to "snitch" and when not to "snitch," this being the slang expression for telling on another.

The moral development of the child must in a measure depend upon his physical development. You cannot separate the two. The child is entitled to be well fed, nourished, housed, and cared for. This means again that his moral welfare must depend upon the economic conditions under which he lives, and just in proportion as we improve these conditions, just to that extent do we increase the chances of the child to become a healthy, wholesome, moral, strong citizen.

Neither can we leave out of consideration the importance of industrial training. Just in proportion as we equip the child for industrial efficiency, to that extent do we equip him for moral efficiency. Human character too weak to resist temptation is a prolific source of immorality. Therefore, just as we equip the boy and girl by practical training to meet the real conditions of life by ability to care for themselves thru honest labor, to that extent do we really strengthen character and reduce the chances to yield to temptation.

It is a sad thing to read reports from school officials in cities, for example, that 90 per cent. of school children have bad teeth. It is not at all far-fetched when we point this out as one of the causes of immorality. Moral weakness is often very properly traceable to physical deficiencies. Such defects may be and happily are being removed by the work of the schools. So long as we have parents in this country, as has been said, "who are as competent to set the character of a little child as they are to set its broken leg," we must depend upon the school to supply the deficiency of the parent and the home.

Medical inspection and the work of the visiting nurses alone, thru the direction of the schools, can do more for the moral welfare of the children of this nation than all the children's courts can ever do.

One of two things seems fairly plain: either we must revise our ideas of

what is to be exacted from the public schools, or we must reorganize the schools upon a very different and much broader and more expensive foundation. If education is to be made not merely a period of schooling, not even a preparatory course for the duties of life, but part of life itself, it is evident to even a cursory observer that the profession of the teacher is shortly to be regarded quite as seriously as that of the physician or lawyer, and remunerated accordingly. There must be many more classes, and instructors who are specialists in the subject with which they deal. Education must be made so fascinating that compulsory school laws and truancy officers will come to be regarded as anomalies, belonging to that dark age in our history when special legislation was necessary to bar out the subjects of the Mikado from those schools whose officers were constantly employed in trying to prevail upon native American children to attend.

DEPARTMENT OF SUPERINTENDENCE

CHICAGO MEETING, FEBRUARY 23-25, 1909

SECRETARY'S MINUTES

FIRST DAY

MORNING SESSION.—TUESDAY, FEBRUARY 23, 1909

The Department of Superintendence of the National Education Association met in the Music Hall of the Fine Arts Building adjoining the Auditorium Hotel, Chicago, Ill., at 9:30 A. M., President W. H. Elson, superintendent of schools, Cleveland, Ohio, presiding.

President Elson introduced Mr. Otto C. Schneider, president of the Board of Education of Chicago, who delivered an address of welcome after which the following program was presented:

Topic: The Elimination of Waste in School Work

1. What Is Possible and Desirable in the Simplification of the Elementary-School Course?—The Next Step.—J. B. Richey, superintendent of schools, McKeesport, Pa.

2. The Retardation of Pupils in Studies: What Is It and How Can It Be Minimized?—J. M. Greenwood, superintendent of schools, Kansas City, Mo.

3. Fundamentals in the Elementary-School Curriculum.—Junius L. Meriam, Teachers College, University of Missouri, Columbia, Mo.

4. In Class Instruction, How Can the Individual Be Reached?—Walter R. Siders, superintendent of schools, Pocatello, Idaho.

Discussion was led by Roland P. Falkner, agent in charge of school inquiries, Immigration Commission, Washington, D. C.—A general discussion followed by Samuel Hamilton of Braddock, Pa.; J. E. Armstrong of Chicago, Ill.; J. Dietrich of Colorado Springs, Colo.; and C. A. McMurry of DeKalb, Ill.

AFTERNOON SESSION

At 2 P. M. President Elson called the meeting to order and the following topic was considered:

Articulation of Higher Educational Institutions with Secondary Schools

1. The Relation of the University to the Secondary Schools.—Stratton D. Brooks, superintendent of schools, Boston, Mass.

2. Higher and Secondary Schools as Related thru Teachers and Teaching.—Robert J. Aley, Department of Mathematics, Indiana University, Bloomington, Ind.

3. The High School in Its Relation to the Community and the College.—Charles E. Chadsey, superintendent of schools, Denver, Colo.

4. Proposed Changes in the Accrediting of High Schools.—Charles P. Cary, state superintendent of public instruction, Madison, Wis.

5. Some Personal Relations of College and High School in this Democracy.—William E. Chancellor, superintendent of schools, South Norwalk, Conn.

Superintendent F. D. Boynton of Ithaca, N. Y., led in discussion.

At the close of the discussion Superintendent Boynton offered the following:

Some years ago the Committee of Ten and the Committee of Fifteen outlined suggestive programs for the elementary and secondary schools which proved of great service as ideals toward which to work as local environment permitted.

Since then conditions in both the secondary and elementary fields have changed and new ideals need to be set. This work can best be done by a committee appointed for this specific purpose. If the "colleges dominate the high-school curriculum," if the elementary

school program is full of "fads and frills," why not cast about us to ascertain how far and why we have drifted so far from the course? In order that this work be carefully done and as a summary of the day's discussion, I wish to offer the following resolution and move its adoption:

Resolved, That the chair appoint a committee of not more than twenty members whose duty it shall be to take under consideration the improvement of the whole course of study—elementary and secondary—and report at the next meeting of this body specific recommendations for improvement.

On motion of H. C. Minnick of Oxford, Ohio, the secretary of the Department was instructed to send to Hon. W. W. Stetson of Auburn, Maine, who was detained at home on account of protracted illness, the following telegram:

The Superintendence Department of the National Education Association sends you a most cordial greeting. It sincerely regrets the cause of your absence and hopes that a speedy and complete recovery will return you to the councils of the Association and that for many years you may be found at its meetings again with your many friends.

EVENING SESSION

The Evening Session was called to order at 8:15 o'clock, President Elson presiding. The topic considered was:

The Problem of the Delinquent Pupil

Mr. Bert Hall, Truancy Department, Public Schools, Milwaukee, Wis., read a paper on: What to Do with the Truants.

What Share of the Blame for the Increase in the Number of Truants and Incurables Belongs to the School? was the subject of an address by Julia Richman, district superintendent of schools, New York City, N. Y.

A Simple Story of Work with Boys was given by John E. Gunckel, Newsboys' Association, Toledo, Ohio.

The president announced the following committees:

COMMITTEE ON NOMINATIONS

Frank B. Cooper, superintendent of schools, Seattle, Wash.

A. E. Winship, editor of the *Journal of Education*, Boston, Mass.

Henry Snyder, superintendent of schools, Jersey City, N. J.

L. L. Wright, state superintendent of public instruction, Lansing, Mich.

A. C. Nelson, state superintendent of public instruction, Salt Lake City, Utah.

COMMITTEE ON RESOLUTIONS

Nicholas Murray Butler, president of Columbia University, New York City, N. Y.

J. B. Aswell, president of State Normal School, Natchitoches, La.

Francis G. Blair, state superintendent of public instruction, Springfield, Ill.

H. H. Seerley, president of State Normal School, Cedar Falls, Iowa.

J. Dietrich, superintendent of schools, Colorado Springs, Colo.

A. W. Rankin, professor of education, University of Minnesota, Minneapolis, Minn.

Meeting adjourned.

SECOND DAY

MORNING SESSION—WEDNESDAY, FEBRUARY 24

Meeting called to order at 9:30 A. M. by President Elson.

Topic: The Schools in Relation to Character Building

1. Moral Enthusiasm in the Making.—Arthur D. Call, district superintendent, Hartford, Conn.

2. Ethical Training in Schools.—Ella Lyman Cabot, member of the Massachusetts Board of Education, Boston, Mass.

3. Music as a Moral Influence.—William L. Tomlins, New York City, N. Y.

4. The American Peril.—John W. Abercrombie, president of University of Alabama, Tuscaloosa, Ala. General Discussion.

W. N. Hailmann of La Porte, Ind., at the close of the discussion made the following motion which was unanimously adopted:

Resolved, That a committee of twelve be appointed by the President of this Department to examine into the claims advanced by Wm. L. Tomlins in his addresses of 1897 and again at this meeting with reference to school music, the committee to report to this Department, provided, however, that no funds of the Association be used for the promotion of this purpose.

BUSINESS SESSION

The report of the Committee on Nominations was called for by President Elson and Superintendent Frank B. Cooper, chairman of the committee, submitted the following nominations:

For President—Stratton D. Brooks, superintendent of schools, Boston, Mass.

For First Vice-President—Wales C. Martindale, superintendent of schools, Detroit, Mich.

For Second Vice-President—Miss Julia A. Richman, district superintendent of schools, New York City, N. Y.

For Secretary—John F. Keating, superintendent of schools, Pueblo, Colo.

The report was unanimously adopted and the nominees declared elected.

Invitations to hold the meetings of the Department for the year 1910 were received from Mobile, Ala.; Indianapolis, Ind.; Atlantic City, N. J.; Rochester, N. Y.; Toledo, Ohio; Dallas, Tex.; and the City of Mexico.

After several ballots were taken, Indianapolis received 278 votes, a majority of the votes cast, and was therefore declared the choice of the Department as the place of meeting in 1910.

The invitation extended to the Department by the officials of the government of Mexico expressed a desire, in case it was not deemed advisable to hold the meeting of the Department in the City of Mexico in 1910, that a committee be sent in August to represent the Department at the celebrations of the first centennial of the political independence of that nation. The President of the Department was authorized by a unanimous vote to appoint a committee of three to meet the wish conveyed in the invitation and the following members were appointed: Francis G. Blair, state superintendent of public instruction, Illinois; E. A. Jones, commissioner of education, Ohio; and Professor Horace H. Cummings, superintendent of schools of the Latterday Saints, Salt Lake City, Utah.

President Elson read the following telegram to the Department:

AUBURN, ME., February 24, 1909

Your message from the Department brings joy and strength. May blessings unnumbered come to the most useful body of men and women the Lord has seen fit to give to the world.

(Signed) WILLIAM WALLACE STETSON

AFTERNOON SESSION

ROUND-TABLE CONFERENCES

The afternoon was devoted to the respective round-table meetings with programs as follows:

(A) ROUND TABLE OF STATE AND COUNTY SUPERINTENDENTS

Leader—J. B. Aswell, president of State Normal School, Natchitoches, La.

1. The Worth of a Trained County Superintendent.—Francis G. Blair, state superintendent of public instruction, Springfield, Ill.; T. H. Harris, state superintendent of public instruction, Baton Rouge, La.

2. Is the Employment of Untrained Teachers the Cause or the Result of Low Salaries?—David Felmley, president of State Normal University, Normal, Ill.; V. L. Roy, superintendent of schools, Avoyelles Parish, La.

3. The County Superintendent's Duty to the Untrained Teacher in the Service.—R. L. Jones, state superintendent of public instruction, Nashville, Tenn.

4. The Question of Agreement upon the Fundamental Group of Statistical Items Which Shall Be Uniform for All the States.—H. C. Morrison, state superintendent of public instruction, New Hampshire; E. C. Bishop, state superintendent of public instruction, Lincoln, Nebr.

5. The Reorganization of the Library of the Bureau of Education with a View to Make It an Agency for Effective Co-operation with Pedagogical Libraries thruout the Country.—Elmer Ellsworth Brown, U. S. commissioner of education; P. P. Claxton, professor of science and art of teaching, University of Tennessee, Knoxville, Tenn.

(B) ROUND TABLE OF SUPERINTENDENTS OF LARGER CITIES

Leader—W. M. Davidson, superintendent of instruction, Omaha, Neb. Session in South Parlor, second floor, Auditorium Hotel.

Topic: The Next Step in the Improvement of the Course of Study—Elimination and Simplification for Enrichment. Leaders in discussion: C. F. Carroll, superintendent of schools, Rochester, N. Y., and C. N. Kendall, superintendent of schools, Indianapolis, Ind. General discussion: John R. Kirk, president of State Normal School, Kirksville, Mo.; A. E. Winship, editor, *Journal of Education*, Boston, Mass.; Joseph H. Hill, president of State Normal School, Emporia, Kan.; Charles E. Chadsey, superintendent of schools, Denver, Colo.; John W. Cook, president of State Normal School, DeKalb, Ill.; John A. Whiteford, superintendent of schools, St. Joseph, Mo.; C. G. Pearse, superintendent of schools, Milwaukee, Wis.; William H. Hatch, superintendent of schools, Oak Park, Ill.; Reuben Post Halleck, principal of Boys' High School, Louisville, Ky.

(C) ROUND TABLE OF SUPERINTENDENTS OF SMALLER CITIES

Leader—Vernon L. Davey, superintendent of schools, East Orange, N. J. Session in Banquet Room, sixth floor.

1. Industrial Training.—O. I. Woodley, superintendent of schools, Passaic, N. J.

a) In Grammar Schools.—A. C. Thompson, superintendent of schools, Auburn, N. Y.

b) In High Schools.—Joseph M. Frost, superintendent of schools, Muskegon, Mich.; Carleton B. Gibson, superintendent of schools, Columbus, Ga.

c) In Vocational Schools.—Wilbur F. Gordy, superintendent of schools, Springfield, Mass.

2. The Ward-School Principal.—Milton C. Potter, superintendent of schools, District 1, Pueblo, Colo.

a) His Necessary Training before and after Appointment.—S. O. Hartwell, superintendent of schools, Kalamazoo, Mich.

b) How Can He Be of Most Service?—B. E. Nelson, superintendent of schools, Racine, Wis.

3. The Problem of Slow Pupils: How to Handle Them.—H. V. Hotchkiss, superintendent of schools, Akron, Ohio.

a) In the High School.—E. S. Dreher, superintendent of schools, Columbia, S. C.

EVENING SESSION

Meeting of Joint Session with American School Hygiene Association, President Elson presiding.

The President introduced Edward L. Stevens, associate superintendent of schools, New York City, who read a paper on The Necessity for Departments of Hygiene within Boards of Education. This paper was written by Superintendent William H. Maxwell, of New York City, who was unavoidably absent from the meeting.

George E. Johnson, superintendent of Playground Association, Pittsburg, Pa., read a paper on The Hygiene of the Public Playground.

Dr. Woods Hutchinson of New York City gave an address on The Evil Influences of School Conditions upon the Health of School Children.

Dr. Frank Allport, Professor of Clinical Ophthalmology and Otology, Northwestern Medical School, delivered an address on the topic: A Plea for the Systematic Annual and Universal Examination of School Children's Eyes, Noses, and Throats.

Dr. Herbert D. Schenck followed in discussing different phases of the subjects of the addresses of the evening.

THIRD DAY

MORNING SESSION—THURSDAY, FEBRUARY 25

The Department was called to order at 9:30 A. M., President Elson presiding.

The topic of the session was Industrial Education, which was treated in the following program:

1. The Dignity of Vocation as a Fundamental Idea in Industrial Education.—Kenyon Butterfield, president of Massachusetts Agricultural College, Amherst, Mass. As Mr. Butterfield was unavoidably absent from the meeting Chas. S. Howe, president of Case School of Applied Science, Cleveland, O., read his address.

2. Shall Industrial Education Be Treated as a Phase of the Problem of Universal Education?—Eugene Davenport, dean, College of Agriculture, University of Illinois, Urbana, Ill.

3. Industrial Education as a National Interest.—Elmer Ellsworth Brown, United States commissioner of education, Washington, D. C.

4. Getting Our Bearings on Industrial Education.—Jesse D. Burks, chairman of Committee on Place of Industries, Teachers Training School, Albany, N. Y.

AFTERNOON SESSION

John W. Withers of Teachers College, St. Louis, Mo., read an address treating the topic: The Functions of a City Training School.

The following resolution was unanimously passed by the Department:

Resolved, By the Department of Superintendence of the National Education Association, that the Department has learned with deepest regret of the illness of Dr. W. T. Harris, ex-commissioner of education, that the Department has greatly missed from this meeting his presence and his counsel, and that the Department earnestly hopes for his speedy and permanent restoration to health, so that the country may for years to come continue to enjoy his philosophic and practical leadership in education.

The Committee on "Phonetic Key Alphabet" reported as follows:

To the Department of Superintendence of the N. E. A.:

Your committee appointed to invite and join with like committees from the Modern Language Association and the American Philological Association to prepare and recommend a practical phonetic alphabet for key purposes, begs leave to submit the following report:

The joint subcommittee, on which the other two societies were represented by members of the highest eminence and influence as experts in linguistic science, after careful and earnest conference, submitted its preliminary report in 1905 (which was distributed at the Milwaukee meeting) with the expectation that after criticisms and suggestions had been received, its final report would be issued. That preliminary report was prepared and signed by the experts who represented the M. L. A. and the A. P. A. on the subcommittee. In matters of detail there had to be some surrender of personal preferences, of course; but the report, and the alphabet contained in it, were finally agreed to and signed cordially by the entire subcommittee. Considering the eminent source of that alphabet, as above explained, the difficulties overcome or compromised in reaching it, and the unanimity with which it was agreed to by the joint subcommittee, your committee regarded it, and still regards it, as eminently sensible and satisfactory, and worthy of hearty indorsement by all interests. There seemed no reason to doubt that when finally submitted it would be indorsed by the parent societies substantially as recommended by the subcommittee.

However, by a series of misunderstandings, not necessary to recount, this preliminary report, without ever having been revised or put into final form, was brought before the M. L. A. and the A. P. A. at their 1906 meetings. Each society referred the report to a special committee, "to examine and report what, if any, amendments are desirable before the alphabet proposed by the joint committee shall be submitted to the Association for final action." These two special committees brought in concurrent reports recommending various definite changes in the alphabet before it should be indorsed by the two societies. Instead of the joint report, together with these recommendations, being referred back to the joint committee for consideration in preparing its final report, as had been expected, the recommendations were concurred in by each society and the preliminary report of the joint committee, thus amended by each of these two societies to suit itself, was adopted. This action, taken in disregard of this Department, but, we believe, without any intentional discourtesy, thus abruptly and prematurely removed the report and the alphabet from the hands of the joint committee and left the committee with no further function.

It is needless to explain the embarrassment of the situation in which your committee is thus placed as your representatives. Upon careful consideration we find ourselves quite unable to acquiesce in some of the amendments adopted, and compelled to deprecate the others as needless or unfortunate. We realize that, in accordance with the purpose for which our committee was created, we are looking at this alphabet question rather from the view-point of adaptation to practical, everyday use and of its enlisting popular and commercial interest. While we are deeply impressed with the need, both in the school-room and out of it, of a uniform system of key notation, we feel that such a key can be and should be based upon a simple, practical, phonetic alphabet, as free as possible from all characteristics which may needlessly arouse antagonism or prevent its gradual growth into common, everyday use, but which at the same time, with possibly slight modifications, the lexicographer and the phonetician can use for their more precise purposes.

We believe that in solving this problem the prepossessions and personal preferences of the expert should be made subordinate to ease and convenience in common, everyday use, and to striking the line of least resistance to acceptance by the people and by publishers. If in two or three instances the same symbol is not satisfactory from both standpoints, we believe optional forms should be adopted. But we deprecate the promulgation of a phonetic alphabet by the experts alone which the educators of the country, from their practical view-point and with their influence with the great public and with the publishers, cannot heartily indorse. One of the objects in inviting this conference, an object which must command the sympathy of every thoughtful person who appreciates the importance of having such an alphabet well received when launched, was to unite the utmost amount of scholarship and influence in supporting and promoting its introduction—first for pronouncing purposes, and ultimately for common every-day use. In our judgment, it would be most unfortunate to drop the matter where it is at present. Only a comparatively few points of disagreement now remain which can be considered important from any point of view. We believe the members of the other societies will concur in the opinion that agreement on these points should by all means be reached. We earnestly desire to see another strong effort made to agree upon a phonetic alphabet which all of us, educators and specialists, can heartily indorse for practical use as well as for expert use. Accordingly we recommend that your committee be continued with instruction to invite the attention of the Modern Language Association and the American Philological Association to the present situation as regards the report on a phonetic alphabet and to propose to these two societies that the points of disagreement be referred to the same or a like committee of conference with instruction to come into accord on these points if it is possible to do so.

E. O. VAILE, *Chairman*

T. M. BALLIET

MELVIL DEWEY

H. H. SEERLEY

Committee

The report was unanimously adopted, and ordered filed with the Secretary.

The Committee on Resolutions then presented its report.

The resolutions presented by the committee were after considerable discussion laid on the table.

To give future committees on resolutions ample time to consider matters of educational interest and importance which might be deemed necessary to be presented to the Department in the form of resolutions, the president-elect was instructed by resolution to announce the appointment of such committee at least one month before the meeting of the Department.

There being no other business the Department adjourned.

A. C. NELSON, *Secretary*

PAPERS AND DISCUSSIONS

TOPIC: THE ELIMINATION OF WASTE IN SCHOOL WORK

I. WHAT IS POSSIBLE AND DESIRABLE IN THE SIMPLIFICATION OF THE ELEMENTARY SCHOOL COURSE?—THE NEXT STEP

JOSEPH B. RICHEY, SUPERINTENDENT OF SCHOOLS, MCKEESPORT, PA.

So great was the number of subjects recommended by the Committee of Ten to be taught in the elementary schools, that the committee itself said that if anyone feels dismayed at the number and variety of the subjects to be opened to the children of tender age, let him observe that while these nine conferences desire each their own subject to be brought into the courses of elementary schools, they all agree that these different subjects should be correlated and associated one with another by the program and by the actual teaching.

Experience has taught us that the different subjects cannot be successfully correlated by the program as recommended by the committee. It is possible to correlate the different subjects by the teaching. History should be correlated with geography, not for the purpose of teaching geography, but for the purpose of enriching the teaching of history. During the past five or six years there has been an attempt made to simplify the course by omissions of whole or parts of subjects. While it is possible to reduce the amount of work by this method, yet it is not the solution for the problem of simplification. It is true that eliminations will be necessary, but they will be eliminations of degree as well as eliminations of parts of subjects.

Before we begin to discuss what is possible and desirable in the simplification of the elementary-school course, it will be necessary to examine the charges which are being made against the present curriculum.

First indictment.—It is alleged that too much work is required of the children of the public schools; that to do the work as outlined in most school courses, pupils are compelled to study for hours at night after five or six hours' application to their studies in school, thus robbing them of the time that should be given to play and recreation, which are so necessary to their growth and happiness. This charge is well founded. No child of the first four grades should be required to study at home. The time out of school should be devoted to playing, reading, and sleeping.

The children in the fifth and sixth grades should be required to do systematic reading at home under the direction of the teacher. Such reading should be closely related to the study of subjects in geography, history, and literature.

The children in the seventh and eighth grades should be required to study one subject, as history, at home and also to do systematic reading which should be closely correlated with the subjects taught in school. The home reading should be as carefully selected and graded as the subject-matter of the regular

studies. A few books should be chosen and the children should be held responsible for a thoro reading of same. It is a waste of time and dissipation of the energies of the children to require them to read book after book and not be able to discuss intelligently their contents. Under no circumstances should problems in arithmetic, or written work of any kind, be given for preparation out of school.

Second indictment.—It is alleged that the work of the public school lacks thoroness. This charge, too, is well founded. The essentials of the different subjects should be so thoroly taught that they become a part of the child himself. He should have definite ideas about the fundamentals of each subject of the grade. Instead of his knowledge being hazy and confused, it should be clear, plain, and definite. It must be more intensive. The facts must be thoroly learned. There is no reason why the child should not be able to carry well-defined ideas of the subject-matter taught in the one grade to help him interpret and master the work of each succeeding grade. To accomplish this takes time. Time is an element in mental growth. It takes time to acquire clear and definite ideas. Thinking also takes time; and haste in teaching any subject defeats the very purpose of the teaching.

Third indictment.—It is alleged that the present curriculum is one-sided; that too much time is given to the study of books, and not enough to the study of actual things; that radical changes have taken place in our social and industrial life, and the old curriculum does not meet social requirements and needs. This indictment, too, is well founded. The public demands that the course be simplified so more time can be given for instruction and practice in the elements of productive industry, including agriculture and the mechanic and domestic arts.

Fourth indictment.—It is alleged that our crowded curriculum is largely responsible for the retardation found in our schools; that the child of average ability is unable to do the work required in the specified time; that many children become discouraged, lose interest, and leave school as soon as the period of compulsion has been removed. This, too, is well founded. Most of the children in the grades are from one to two years older than they should be. This is due to the fact that the subject-matter is often too difficult for the children of normal abilities, is unorganized, both from the standpoint of the course and the teaching, and that the quantity is more than the children can assimilate.

We have four true bills against the present curriculum; namely, overworked children; lack of thoroness; failure to meet the requirements and needs of our present social and industrial life; retardation of pupils.

The next step in the simplification of the course of study must be taken by experts who are able to apply theory to the actual practice of the school. We need educational standards to guide the experienced and well-trained teacher and superintendent as well as the inexperienced and unskilled. While we have been discussing the theory of the course of study and the aim of educa-

tion, the fact remains that very little has been accomplished in removing the charges which have been constantly made against the schools. After examining one hundred and fifty courses used in every part of the country, I am satisfied that only occasionally has there been any attempt to make an application of the most important and fundamental principles underlying the course. Text-books which have been prepared from a commercial standpoint have determined the character of the courses more than educational principles.

Can anything be done to relieve the situation? Is it possible to dismiss these charges by simplifying the course of study? If so, what is to be the nature of the simplification? No course of study which indicates only the number of pages to be covered in each subject in a given time can in any sense be a simplified course.

It is my idea that the simplified course should be worked out in detail in a manual that is to be placed in the hands of the teachers. It should consist of a monogram upon each subject taught. The preparation of these monograms would be very difficult and would test the professional strength of the superintendent in a very critical fashion.

It is possible to simplify the course—

1. By determining the minimum amount of time that should be given to each subject. The simplified course should indicate the number of weeks and the number of hours per week that should be given to each subject in each grade.

2. By determining when each subject should be taught.

3. By determining how much of each subject should be taught in each grade. We must remember that the course contains the educative material to be used by the teacher in the educative process. The course should indicate just how much (depth and breadth) of each subject should be studied in each grade. The essentials should be indicated and only such details should be taught as are necessary to make clear the fundamentals. The content of the subject-matter for each grade can be determined only by taking into consideration the capabilities of the normal child at each stage of its growth. The child should be exhausted instead of the subject. The assignment should be definite. The outline for fractions, for example, in the fifth grade, should give type problems, both mechanical and practical, for the purpose of indicating just how difficult the work should be made at each stage of the development of the subject. What is true of the subject of fractions in the fifth grade is true for each subject in all grades. Permit me to give another example. The study of poetry is a part of the curriculum of all schools. I find, after careful investigation, that most courses require from eight to fifteen poems to be studied and many of them committed to memory in one year. The time necessary to do this work would be from 50 to 75 per cent. of all the time that should be devoted to the study of language, of which poetry is a part. No more poems should be studied in a given time than can be properly and profitably taught in the time to be given to that subject. At this point we can reduce the quantity at least 50 per cent. and increase the efficiency at the same time, one hundred fold.

4. By the organization of parts within each of the branches of study. "Objective correlation, as given in the report of the Committee of Fifteen, discusses the relative educational value of studies, and involves a consideration of their equivalents. It merely determines the function of each study in enabling the child to master his environment, thus giving the reason for its presence in the curriculum; but it determines nothing as to the time, amount, sequence of parts, the relation of the other branches that correlation should have in the recitation." The course should give the order of topics of each subject in proper

sequence so that each branch will be developed in a manner suited to the natural order of the subject and the progress of the child. Each subject should be so clearly outlined and so fully elaborated that the grade-teachers, experienced or inexperienced, would have little or no difficulty in understanding it. The great waste in teaching is due to the fact that the work is given to the children unorganized and without due regard to their abilities. If the facts are consecutive and naturally connected, the amount of material that the average child can assimilate without injury is astonishing, as is the little that will fag him if it is a trifle above or below or remote from him or taught dully or incoherently.

5. By proper presentation of the subject-matter by the teacher. The teacher will complete the simplification by carefully planning and organizing material for each day's work, selecting details necessary to make clear the essentials which she proposes to teach. "The purpose of the recitation must be so clear in the mind of the teacher that she can state it with definiteness and exactness and show that it has a necessary place and where that place is, in working out the general purpose. The success of the individual teacher's work depends primarily upon this definite idea and definite end for each day's work in the subject. It may very well happen that the teacher may have in mind a definite purpose in today's lesson, and may work skilfully and secure good work on the part of the pupils for the accomplishment of that purpose and yet the work may be utter waste of time, because the aim of the recitation has no place in the general purpose for which the subject is being taught."

The course should be arranged so that at least one-half of the time of the fourth, fifth, and sixth grades in arithmetic, language, and geography is a review of the work of the preceding grades, making it possible for a pupil strong physically and mentally to complete the work of the first six years in five.

In my experience I have found few pupils who have gained very much by shortening the time in completing the elementary course. What they have gained in time they have lost in power and efficiency. By skilful training we may increase the knowledge of the young child, but we cannot in the same ratio increase his powers of reason and of independent thought.

While the course should be arranged so it is possible for the bright pupils to gain time, it should be primarily arranged so that a pupil of average ability will be able to complete the work of each grade in the given time, with close application to the work during school hours, and such work out of school as I have indicated in the first part of this paper.

Such simplification of the course of study will make it possible to conserve the energies of the children; to master more thoroly the essentials of the subjects studied; for the average child to complete the course in a specified time; to shorten the time required each day to accomplish the work in the academic subjects in order to give boys time to learn how to work on the farm and in the shop, and to give the girls time to learn how to perform the duties of the home.

To be of real service to the schools thruout this country, the next step to be taken in the simplification of the course of study should be taken by this department. A committee prepared to formulate such a course should be appointed. Let us have such a practical application of theory that will take into consideration the physical strength, the mental capacities, and the needs of the children.

II. FUNDAMENTALS IN THE ELEMENTARY SCHOOL CURRICULUM

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I wish to discuss in this paper, first, what seems to me a fundamental weakness in our present elementary-school curriculum; second, a fundamental principle for guidance in the selection and arrangement of a content better suited to present needs. What I have to say is based largely upon my experiments and study in directing the Teachers College Elementary School of the University of Missouri during the past four years.

Waste in school work is due to a maladjustment between means and end. Too frequently educators look for the solvents of this waste in better systems of management and better methods of instruction. On the contrary, I am forced to believe that the real source of waste is the maladjustment between the content of the curriculum, on the one hand, and the needs of the pupils and the needs of the community, on the other. Time is wasted, not by reason of a lack of machine-like organization, but rather by reason of the presence of a dozen or more subjects in each grade. To teach all these the school must run on schedule time. Energy of both teacher and pupil is wasted in the very beginning of reading and ciphering, not by reason of faulty method but because the usual primer and number work are inappropriately selected. No wonder "Emmy Lou, laboriously copying digits, looked up"¹ and gave attention to the little boy making signs to her. In the nature of the curriculum is found the real source of waste in school work.

THE FUNCTION OF THE CURRICULUM

I wish at this point to consider the function of the elementary school curriculum from two points of view: that of the adult and that of the child.

Adult view.—The idea of preparation for complete living has so dominated educational thought that the school is looked upon as an institution to which the child is intrusted for a season, at the close of which he is returned to the community as an efficient social factor. Social efficiency has reference, primarily, to the ultimate aim of education. The adult, with this aim in mind, selects and arranges the content of our elementary school curriculum.

It is probably under the influence of science that the adult has been led to analyze his varied experiences and to arrange them in the categories of arithmetic, geography, reading, grammar, etc. As human experience may be thus classified, it has apparently been assumed that instruction should be given in these subjects. So it is that we have our program of studies. In early ages life was exceedingly simple; little more than the three R's sufficed to classify such experience. Twentieth-century life, on the contrary, is so complex that almost a score of school subjects are used.

Such a curriculum may be described as follows: First, it is an arrange-

¹ George Martin, *Emmy Lou*, p. 3.

ment of isolated, unrelated experiences: arithmetic with no essential relation to geography; drawing with no close relation to nature-study; and so with all the subjects. Second, the curriculum is congested. The ever-increasing number of subjects and topics is only the inevitable result of the ever-increasing complexity of our civilization. These subjects are generalizations of our experiences. If the curriculum is to consist of such generalizations, the congestion cannot be avoided. Third, the curriculum is abstract rather than concrete. Dr. Frank McMurry is right when he claims that materials of instruction are "concrete only when they deal with real things and with actual, significant situations."¹ Facts, isolated from their original association and having now no specific function, are abstract. Accepting this we are forced to regard as abstract practically all the content of our curriculum, as it is usually arranged. Taken by itself with no relation to any significant situation, the fact that the Albany Congress in 1754 failed to accomplish its purpose is as truly abstract as the principle for the division of one fraction by another. It is against this abstract formal nature of elementary education that Dr. Kerschensteiner, of Munich, has taken so strong a stand. Thus the curriculum, as now arranged, is crowded with isolated subjects of an abstract nature.

The evils of such a situation are too obvious to mention. But to counteract these evils and to make the curriculum more efficient three special remedies have been proposed in recent years: First, enrich the work. This has been done by increasing subjects, topics, and details, and by applying the abstract in concrete situations. The former has only crowded the schedule and the latter has proven superficial. Second, relieve congestion by omission. Conservatism and personal prejudice have blocked progress here. Further, omission is seen to be only a temporary relief, not a principle providing for permanent prevention of congestion. Third, correlate the subjects. The result has been a forced and therefore wholly unnatural and superficial adaptation of one subject to another.

Strenuous endeavor to improve the curriculum by enrichment, omission, and correlation has done much, but by no means sufficient to meet present demands. The attempt has been to repair an old curriculum. This curriculum has grown up under varying influences, foremost of which have been the claims of culture and the idea of preparation for later life. This is what I call the adult view.

Child-view.—Quite contrary to this view is that from the standpoint of the child. There is more truth than fiction in Charles Dudley Warner's magnificent little book, *Being a Boy*. He says, "Boys, in general, would be very good farmers if the current notions about farming were not so very different from those *they* entertain. What passes for laziness is very often an unwillingness to farm in a particular way."² (And that is the way of the adult, as he goes on to show.) Much the same may be said of the boy in school. A serious

¹ *Teachers College Record*, Vol. IV, No. 2, p. 6.

² Warner, *Being a Boy*, p. 11.

injustice is done the boy when he is judged by adult standards. And it is exactly such standards that we use when we insist that the boy learn the principles of percentage and the geography of Australia because, perchance, he may have use for that information in adult life. The schoolboy is as yet too limited in experience to plan for the future. His aim is to live in the immediate present. He cares for arithmetic only so far as it contributes to his present needs; for geographical facts only so far as they contribute to his immediate interests. And we adults are slowly coming to this view. For many years students prepared for college by the pursuance of courses selected by the college for that purpose. The dictation of a higher school to a lower is what President Jordan calls "a species of impertinence which only tradition justifies."¹

But we are learning that the most adequate adjustment today prepares best for adequate adjustment tomorrow. The boy cares little to prepare for the future; his great desire is to act now. This child-view is in strictest accord with recent thought designated by the term pragmatism. To use the words of Professor Woodbridge, "It would aim to introduce subjects into the general course of study at the times when these subjects are needed for the extension of knowledge already acquired. It would make against the tendency to insist on certain subjects on the ground that they may prove of advantage to the student in later life. . . . It would make the point of departure in the education of the individual students, the student himself and his environment."²

It is from this point of view that I wish to suggest some principles that may guide us in selecting materials of instruction and then outline briefly what that curriculum would be. But before going farther let me remind you that our problem here is not to enrich our present curriculum by the introduction of fads and frills or even manual training and vocational subjects. Nor are we concerned with the problem of advisable omissions from our program of studies. And correlation, important as it is when normal, need not trouble us as we are simply face to face with a large school population teeming with the spirit of activity and asking: What can the school do to help us in what we are doing today?

PRINCIPLES OF SELECTION

Let me suggest four principles to guide in the selection and arrangement of the content of the curriculum:

First, that content has a place in the curriculum which meets real, present needs of the pupils. This is an era of industrial and vocational agitation. Kerschensteiner in Germany, Sadler in England, the Commission on Industrial Education in Massachusetts, the Commissioner of Education in New York, and so on to the remotest rural school, are just now laying much emphasis on industrial, vocational, and trade schools. This attitude is due to the ever stronger conviction that our schools are not serving adequately individual and com-

¹ *Educ. Rev.*, XXXVI, 372.

² *Op. cit.*, XXXIV, 240.

munity needs. The effect is the tendency to demand that the curriculum be more practical and constructive, relating more specifically to everyday life. The old "culture" aim is yielding to the utilitarian and we are not averse to this, for "culture" is no longer confined to formal, intellectual accomplishments, but finds its realization in any work nobly done. The real needs referred to in this principle are not limited to vocational interests of youth and adult life. They must extend down to the child first entering school. Any of his normal, wholesome activities may rightfully claim assistance from the school.

Second, only that content has a rightful place, in the study of which the pupil has a conscious motive. Here will be debarred practically all that is formal and abstract in our present curriculum. This principle does not refer to that which is superficially interesting, but rather to that in which the pupil finds a contribution to his need, and which thus supplies a real motive.

Third, only that content may be admitted which the pupil can comprehend and the significance of which he can appreciate. This principle debars practically all that is usually given as mere discipline.

Fourth, only that content may be admitted which contributes to the continuity in the development of the special problem being studied. This principle debars all isolated bits of information, but on the positive side suggests a wholly natural scheme of correlation.

CURRICULUM SUGGESTED

In attempting to arrange a program of study for the elementary school, we must bear in mind that pupils cannot study all that is within their comprehension, or all that is available. We must select wisely from a great wealth of possible material. Further, we must select, not in terms of arithmetic, geography, grammar, etc., but in terms of child-activities and adult pursuits. Activities of children and activities of adults are real content for they are concrete experiences. Arithmetic, geography, and grammar are only form-studies in such experiences. It would be the height of folly and a gross insult to the wisdom of the past—and the present—if we advised our public school to set aside abruptly our present curriculum. Emancipation from tradition is practically impossible for school men and school communities. But, for the sake of emphasizing a point of view which will tend to contribute much to making our curriculum more commensurate with contemporary needs, let me ask you to set aside for the moment our established program of studies and consider quite a different plan of work.

In applying the four principles suggested above we are confronted with the question: What are the normal activities of children of school age, in which the school can assist? During the first two or three years of school life, play, simple observation of any wholesome thing within reach, and commonplace handwork are dominant. The educational value of well-directed play is emphasized by educational psychologists, by the Playground Association of America, and by school men who are in sympathy with child-life. The edu-

cational importance of observation and handwork is emphasized by all classes of practical men. At first, these three activities center largely in the self, but as the child grows older he becomes interested in the activities of those about him and later interested in industrial activities in the world at large. We are a motor people and so are our pupils. To help them in their own activities and in understanding the activities of others is the function of the curriculum.

Acting in accordance with this view the elementary school at the University of Missouri is using the following curriculum: in each of the first three years the playing of wholesome games, the observation of anything interesting and profitable to children, and the making of things useful and ornamental; in the fourth year, local industries, as found in the blacksmith-shop, the post-office, the laundry, the grocery store, the meat market, the dairy, the shoe factory, the farm; in the fifth and sixth years, industries at large, such as fishing, lumbering, mining, manufacturing, transportation, government; in the seventh year, the development of important industries, especially within the United States.

In pursuance of such a course the three R's, language, drawing, and geography, contribute what they can. A bit of handwork done by the first grade just before Christmas was much enriched by a personal account of the making, which was read by the pupils.

MAKING A CALENDAR

Do you know, a Christmas fairy whispered to us that it would be great fun to make our fathers a Christmas gift?

We could make so many things that we hardly knew what to choose.

We could have made pen wipers, blotters, boxes for the desk, mats for the ink wells, book marks, napkin rings, and some other things.

But we decided to make calendars for the month of January.

Do you not think our fathers will be pleased?

The second grade had marked off our oblongs of paper.

The spaces were ready for the numbers of the days.

We wrote January on the top line.

Then the first letter of each day of the week was written below in the small squares.

Everyone wanted to be careful to place under each day the proper figures.

Some of us made mistakes and began all over again.

When these were finished, we fastened them with brass clips to green oblongs of cardboard.

Above the calendar leaves we pasted a picture of the Holy Mother and Child.

Were not these pretty gifts?

It will be readily noted that in this reading, writing, number-work, language, handwork, all are subordinate to that which is worth while in itself—viz., the making of the calendars as a gift. Further illustrations would show all the formal studies in the first three years wholly subservient to real activities in wholesome games, profitable observation, and useful handwork.

In the fourth grade a study—occupying ten days—of a local dairy included the following: (1) an excursion of three hours; (2) readings from twenty

references; (3) thirteen compositions amounting to twenty pages, which included (4) forty problems with additional drill exercises involving the four fundamental processes—fractions, United States money, liquid, and avoirdupois measurements; (5) chemical experiments in the souring of milk; (6) handwork in the making of butter and cottage cheese; (7) science work in the study of various kinds of cows and the care of them; (8) sentence-structure to make clear their own compositions; and (9) seventy-four words liable to be misspelled. All these various “studies” serve as means in the study of the larger problem—that of the dairy as a local industry. This is a type of the work done by the fourth grade in one year’s work on local industries.

In the fifth grade the lumber industry is given twenty-five days. It includes the following work: (1) four excursions to a forest, sawmill, planing mill, lumber yard; (2) readings from eighty references; (3) eighteen compositions covering forty-two pages; (4) twenty-three concrete problems involving the four fundamental processes, square measure and board measure in the United States and several foreign countries, common fractions, decimals, percentage, and considerable drill exercises in these topics; (5) the geography of almost every country on the globe, with three maps carefully drawn; (6) science work on trees, lumber, other forest products, sawmills, etc.; (7) drawing in twenty-two illustrations; (8) literature in both poetry and prose fiction.

It needs but a little study of the manufacture of cotton cloth, for example in the sixth grade, to call for much arithmetical work, geographical data, studies in science, drawing, reading, etc.

Time does not suffice for further illustrations; but I wish to emphasize two leading things accomplished by such a course: First, motive is supplied in answering a felt need. Children are by nature interested in their own activities. This interest develops into an interest in the activities of others—the industrial pursuits of adults. And a study of such industries is worth while. In a recent number of *Science* Mr. Spillman, of the United States Department of Agriculture, rightly pleads for a course of study that will deal with the industries of men. The elementary school should not attempt industrial education as a vocational school, but merely acquaint pupils with the various community activities and with industries at large. In the study of such industries the pupil finds a real motive for some study in arithmetic, geography, etc. The conclusion of Thorndike¹ and others that spelling may well be taught incidentally may probably be extended to other subjects. “Incidentally,” however, does not mean “with no attention,” but rather with real motive, functioning in a larger problem. Second, unity and continuity in the school work are the natural consequences. For four or five weeks the fifth grade devotes its main energy and time to the study of the lumber industry. Attention is given to concrete problems or drill on principles in decimal fractions or in measurements, only as such drill contributes to some quantitative aspect of the industry being studied.

¹ *Principles of Teaching*, p. 273.

It may be added that such a program of studies sets quite at naught the problems of enrichment, omission, and correlation. Further, if the old school still wishes emphasis on the studies now in the curriculum, the program here suggested may well be used as a means to that end. Under the influence of the stronger motive, more of the three R's, language, geography, etc., will be mastered. The vocabulary in the first half-year is three times that of most primers, with general reading correspondingly extended. The seventh grade last year worked out arithmetical problems proportionately more extended than is usual in texts. More compositions are written, and therefore more constructive work in language.

In conclusion, a fundamental weakness of our present curriculum is that it is a patchwork of "studies" thrown together with no principle of relation. These studies are largely the generalizations of adult experience and are offered to the pupil on the ground that they will be of service to him in later life. On the other hand, a fundamental principle for guidance in providing a curriculum better suited to contemporary needs is: Consideration must be given primarily to the real, present needs of the pupils. The school curriculum must consist largely of the concrete in pupil activities, and the concrete in adult industries. This study of real life, with formal "studies" subordinate, is more truly educational and more truly vital than the study of formal generalizations with labored application to life.

III. IN CLASS INSTRUCTION, HOW CAN THE INDIVIDUAL BE REACHED?

WALTER R. SIDERS, SUPERINTENDENT OF SCHOOLS, POCATELLO, IDAHO

The individual can be reached in class instruction by a judicious use of whole-class, group, and individual instruction.

Whole-class instruction presupposes classes in which the members have been reduced to the point where the teacher may be sure of the mental reaction of each individual to the instruction offered. Mass teaching does not make mass learning possible. The individual may bear all the outward marks of earnest attention, but inwardly have a vacant mind.

Whole-class instruction is demanded to afford the necessary subordination of individual impulses to the good of the class. It is stimulating, it arouses competition, and appeals to emulation. But whole-class instruction is planned for the average child who has no existence in reality. It loses sight of individual differences and becomes a machine to grind out a certain uniform product. Where whole-class instruction is relied upon to do all of the teaching, it takes up nearly the whole of the school time and most of the pupil's preparation must be done outside of school hours. Whole-class teaching provides no remedy for the worry and strain put upon the weaker pupil to keep him "up to grade," and none for the teacher who must lengthen her hours to accomplish the bringing-up of pupils behind the class.

The closest classification cannot level pupils to an average which whole-class instruction can invariably reach. Instruction directed at the majority is discouraging to the brightest and the slowest minds in increasing numbers as we advance in the grades. These pupils become disheartened and frequently leave school.

Attempts have been made to answer these objections by reform in method. It was believed that if the teacher properly prepared, properly presented, and properly developed the lesson in accordance with sound pedagogy that there would be no problem of the bright and of the dull child. Our attention has been so fixed upon interest, correlation, and apperception that we have frequently forgotten to inquire how much the pupil knew.

Improvements in methods have not abated the evil for which a remedy is sought. The burden of home-study with parent-tutoring remains. The same worry and strain about promotions exist. Teachers find it not easier to accomplish the allotted portion of the course of study. Pupils continue to "drop out" of school because they cannot keep up with the work, or because they cannot find the work which interests them.

Method has been, and is being, abused. The result: pupils become unable to do independent study, to acquire knowledge for themselves, and to grasp the salient points in what is put before them.

The test of the excellence of any system is the training given the individual child, and there are many who hold that the old-time rural school afforded ideal training because it held no classes and each individual received training according to his needs. Individual instruction lifts up the discouraged and enables each individual to work up to his capacity. It produces independence of work, and wherever it can be applied to productive work it is better than whole-class instruction. But purely individual instruction is impracticable with large numbers. It is undesirable with any number because it eliminates emulation and comparisons. It is futile because it cannot make the solitary learner socially efficient.

To those who are giving the matter earnest attention, it begins to be apparent that some compromise is necessary between the individual teaching of the old-time rural school and the whole-class teaching of the modern graded school. Most of the attempts to organize the graded school on a basis of instruction to the individual and promotion by subjects have resulted in a loss of classification and in confusion. To continue whole-class instruction in the graded school is to sacrifice the minority to the majority. The majority rules, but they should not be permitted to impair the efficiency of the minority.

The present machinery of our graded-school system should be preserved, but its operation upon the individual should be made more efficient. The compromise should be a system whereby whole-class instruction with all its benefits will be retained, and whereby explicit and systematic instruction will be provided for the individual and for such groups of individuals within the class as are experiencing similar difficulties. Such a compromise, if effectually

put into operation, will reach the majority thru whole-class instruction, and the minority thru group and individual instruction. It will make it possible to keep the backward pupil up to grade, and to make such provision for the bright pupil as will compel him to work up to the limit of his abilities.

An investigation of the more prominent plans for group and individual instruction, thus far devised, reveals two different provisions for the bright pupil: either to provide that because of his special aptitude he shall advance thru school more rapidly, or to provide that because of his increased capacity he shall be required to do more intensive work in his subjects in each grade. The latter plan rarely promotes him faster than others in his class.

Because it is difficult to detect whether the child is brilliant or superficial, and because it is always difficult to be sure who the bright pupils are, many of the harmonized systems of whole-class and individual instruction demand that the bright pupil be held in the grade and class as long as the other pupils. Provision is made for additional work for this class of pupils, which is planned to give the pupil a more thoro and more comprehensive knowledge of the subject than is required of the other pupils. This additional work is spoken of as busy work, seat work, or supplementary work. It is held, in the case of these brighter pupils, that the intensive cultivation of a small area will be productive of greater results than the non-intensive cultivation of more extended fields of knowledge.

The plans for advancing the bright pupil thru school more rapidly are either after the type of the Pueblo plan of almost purely individual instruction, or the Elizabeth plan of four or five groups in a room with frequent reclassification and promotions, or the Cambridge double-track plan of arranging a given half of the course of study so that it may be completed in four, five, or six years, according to the rate of progress which the pupil is able to make.

The Batavia plan and the group plan of New York City emphasize keeping all pupils up to grade, getting more intensive work from the bright pupil, and passing the entire grade to promotion without loss. These two plans accomplish similar results, but differ in that the Batavia plan depends more largely upon individual instruction, and the New York City group plan more largely upon group instruction.

The Batavia plan makes individual instruction supplementary to class instruction. It finds its widest adaptability in its double-alternating program for a schoolroom of one teacher, which program provides that in a given subject there shall be on one day whole-class instruction, and that on the next day this same program time shall be given to individual instruction, and further provides that individual work and class work shall alternate on the same day with different subjects. The Batavia plan insists that individual instruction shall be given by a competent teacher, which is a great improvement upon the pupil teaching done under the Bell-Lancaster system.

The insistence that individual instruction shall have as much time as whole-class teaching seems arbitrary. It would be better to leave the amount of

individual instruction to the needs of the class as judged by the teacher, as is done in some systems of group and individual instruction to be mentioned.

The technique of individual instruction differs from the technique of class instruction in that—

1. Initiative must come from the teacher.
 2. All individual instruction is to be by the development method; i. e., the pupil is to be helped to develop himself. Direct instruction is forbidden.
- The principles laid down by Superintendent Kennedy for individual instruction are:
1. Do not give individual instruction upon forthcoming lessons.
 2. Do not tell a child *anything*, but see that he *knows it*.
 3. Do not *do anything for the child*, but see that *HE does it*.
- To which has been added by a Minnesota superintendent:
4. Use the individual instruction period to bring up absent pupils.
 5. Do not try to help too many pupils in one individual-help period.

If it were possible to reduce the number of pupils to a teacher so that she could always be sure of the mental reaction of each individual in the class, it would not insure that all would react in the same time. Some would fully understand upon the first presentation of the subject, and be ready for the application of what they had learned; that is to say, they would be ready for intensive occupation work, such as would enable them to go deeper into the subject, or they would be ready to be passed on to higher work in the same subject, or to pass to work in another subject in which they are not so proficient.

To hold this group in class when they have fully comprehended what is taught means a loss of attention on their part, and an abuse of their time which might be employed in going deeper into the subject while the teacher is further instructing those of the class who need it.

It is at this point where the bright pupils make a departure from the class that group instruction takes its rise. The method pursued in group instruction in New York City is essentially as follows:

1. Each new point is developed by whole-class instruction. A brief test at the close of the lesson shows those who have grasped the point, and those who need further instruction.
2. In the next lesson period the teacher leaves in their seats those who grasped the point in the previous lesson to do individual study upon work prepared in advance for them, which work is an *intensive study* along lines in which the class is proceeding. These pupils may for convenience be designated as Group A. The remainder of the class is called into recitation and taught the same work as in the previous lesson by a new method of attack. A test given at the close of this recitation will reveal another group who have fully comprehended the work. This group may be designated Group B.
3. In the third day's instruction, Group A is provided with new seat work, Group B with the seat work given Group A the day before, and the remainder of the class, now known as Group C, is called into recitation, and worked with one or two days longer until all are proficient. New York does not make a practice of carrying this work beyond three groups.
4. When Group C is proficient, the class is reassembled and whole-class instruction is resumed.

Under the above plan the fast group does more thoro and intensive study upon the same subject-matter, and since this group is drilled upon intensive work there is no danger of superficiality. To insure that seat work is well done, it is always carefully inspected, and is so planned as to be open to easy inspection.

Groups doing this intensive work are forming invaluable habits of study and of self-reliance. The plan provides for the advancement of Group A so that they may in less than one term attain to a working place with the Group C pupils of the grade ahead of them.

This plan does not neglect the slow group which receives more instruction than the fast group. The plan aims not at the education of the few bright ones, nor at the majority, but at the education of all—each according to his capacity to receive. Group A may do the work in less than one term; Group B covers the work fully and thoroly in one term, and Group C is brought up to grade and passes on with the class.

The groups A, B, and C vary, of course, with each subject taught, and from time to time whole-class instruction may proceed several days without the necessity of grouping, and the groups may often not need to be more than two. The plan is flexible and adaptable to the needs of the class.

As has been said before, the group being instructed must be small enough that the teacher may be sure of mental reaction in each individual. Whenever a class is being instructed in such subjects as singing, drawing, or writing where the individual reaction is certain, no grouping is needed, and group instruction would be wasting time, but the necessity of drilling groups in the technique of such subjects is clearly recognized.

None of the special branches nor manual training will, for the above reason, demand group instruction, but in such subjects as reading, arithmetic, grammar, and sometimes writing, the group method of instruction will be found invaluable. The work in these fundamental branches will by this method be much more thoro. Geography, history, and civics are subjects which lend themselves less readily to group instruction. These subjects are best taught by whole-class instruction except for special drill with the weaker pupils.

As the groups in reading will have something of a permanent character they can be used as the basis of seating—this for convenience in handling the groups. The greatest variations will be found in the groups in arithmetic and grammar.

The chief objection against the group system, from the standpoint of the teacher, is the difficulty in planning or finding ready to use suitable seat work to afford the necessary intensive study upon the topic in hand. Unsuitable seat work results in mischievous idleness or in careless, slovenly habits of thought and study. Properly planned seat work makes lessons clearer and applies the principles already learned, and by the drill insures accuracy and facility in all mechanical operations. Repetition makes the pupil's possession more permanent. In the upper grades it trains how to acquire new knowledge by independent, unaided study. It is necessary that the assignments of seat work

be clear and definite and that they call for real study. They must have a definite relation to the grade of work being done and that child must be held strictly responsible for the preparation of the work assigned.

In the Pocatello schools we are trying out a combined system of whole-class, group, and individual instruction. The plan is similar to a combination of the ideas embodied in the Batavia plan and the New York City group plan, but has been developed, so far as it has gone, independently of these plans. Like most other schools we first sought a reform thru method of teaching. The development of the methods demanded a change from whole-class to group and individual teaching, so we have come to depend upon these three ways of handling our pupils.

Our endeavor was to reach the individual without disturbing the system of grading in use—the semi-annual promotion classification—and without creating an elaborate system whereby to attain the desired end. Our first experiment was with the study-recitation. The study period and the recitation period are combined as much as possible. The teacher is instructed to work *with* the pupils over all new work. The teacher's task is *to teach* the advanced work, to develop and to explain all new principles, and to demonstrate *how* the new work is to be done. This instruction leaves for the pupil out-of-recitation work of the following kinds:

1. Memory work—committing definitions, rules, principles, dates, facts, etc.
2. Copy work—copying and expanding the work of the lesson, composition writing, etc.
3. Drill work—solving problems where the principle and the operation have been thoroly taught (the pupils solve such problems for a drill in the principle involved and for facility in operation), also drill work in parsing, analysis, synthesis of elements, etc.

In brief, we try to teach so that all of the more important thinking processes will be developed in the study-recitation, and the mechanical processes will be left to the pupil's out-of-recitation preparation. Questioning and testing sufficient to compel the pupil to do his own thinking are used in the regular class work, but all formal tests are left until a logical portion of the subject has been taught.

The test is to cover two things:

1. The fulness and the completeness of the pupil's knowledge structure.
2. The facility and accuracy of all mechanical operations.

Pupils who are weak in either of these tests are further taught in a group until they become proficient.

With the working-out of these ideas came the need of a plan whereby there could be whole-class, group, and individual instruction in the subjects of reading, arithmetic, and grammar; and so the periods for the study-recitation in these subjects were lengthened to one-quarter, or even to one-half a day, so that there might be time in one period for the different kinds of instruction. During such times the entire number of pupils in the same room work upon the same subject, even if there are two different grade-classes in the room.

By whole-class instruction the new work is developed. When necessary the work is further developed for those who need it by group instruction. By putting the entire room at work upon the textbook in arithmetic, or grammar, or some similar work, the teacher is free to pass from seat to seat to inspect work or to give individual instruction where needed. Our teachers follow the same principles as in the Batavia plan, above stated, for the handling of individual instruction. This individual work enables the teacher to discover what pupils are having special difficulties. These are assembled for group instruction and then dismissed for further individual work. This group and individual instruction is continued until the pupils are again assembled for whole-class work.

There is no limitation imposed upon the teacher by this program. She is free to give whole-class, group, or individual instruction as the need arises. The variety of occupation offered the class affords the necessary relaxation of attention, for we have found that it is not concentration upon one subject that tires so much as one way of doing, or a fixed method of procedure.

The program is calculated upon the basis of the number of minutes per week to be given to each subject. The special subjects of music, drawing, etc., are taught by whole-class instruction three times per week, an aggregate of one hour per week for each subject. The subjects of arithmetic, grammar, and reading are taught in long study-recitation periods as above described, the total number of minutes per week aggregating about two hundred minutes for each grade-class in a room. The subjects of geography, history, civics, and physiology are taught in the length of periods customary for these subjects, and when group or individual instruction becomes necessary in these subjects it is accomplished by instruction one day and by group or individual instruction the following day at the regular program time—the same plan as the Batavia double-alternating system.

In the first grade the pupils are taught in groups of not more than ten, and in the second grade in groups of not more than fifteen. In the third and all grades higher, below the high school, there are not more than two grade divisions for a room. The third grade is taught by means of a double-alternating program.

In the fourth, fifth, sixth, seventh, and eighth grades, the pupils are taught by a combination of whole-class, group, and individual instruction—the study-recitation periods in the fourth and fifth grades being made shorter than in the sixth, seventh, and eighth grades.

In the high school, group instruction and individual instruction are effected when necessary by calling into the recitation room the pupils to receive group or individual instruction. The group left in the study-room is assigned intensive study topics or is permitted to use the time upon other subjects in which they are not so proficient. This, in brief, is our plan.

Teachers differ as to whether discipline is easier or more difficult under the plan of whole-class, group, and individual instruction. The majority

incline to the view that it is easier because pupils are better occupied. It is also the general testimony that the teacher comes to know the pupils and their needs more intimately and that because the teacher's instruction is more wisely adapted. Pupils make more rapid progress in the fundamental branches and learn them more thoroly. They are more self-reliant, more industrious, and more devoted to their work. They obtain more confidence in themselves because the weaker ones are not constantly subjected to a discouraging comparison with the brighter ones. Pupils are more encouraged to continue their work into the higher grades as is shown by the fact that our percentage of grade mortality is constantly decreasing.

There certainly exists in our schoolrooms less formalism than heretofore and more earnest activity of a healthy, interested sort. We do not feel that our plan has yet passed the experimental stage, but we are sufficiently satisfied with the results to continue the investigation of how to reach the individual.

IV. RETARDATION OF PUPILS IN THEIR STUDIES AND HOW TO MINIMIZE IT

JAMES M. GREENWOOD, SUPERINTENDENT OF SCHOOLS, KANSAS CITY, MO.

There is no very definite, technical educational vocabulary in use in this country, and this fact creates much confusion in popular discussion. A term used in one system of city schools may have an entirely different meaning in another city of equal size not a hundred miles away. Seldom do two schoolmen, except in the same system, attach the same meaning to a term that both may use in a public discussion of the same subject. In this paper I shall use the word "retardation" in a technical sense and to signify a subnormal rate of movement by a pupil in completing a prescribed amount of school work in a definite portion of time.

The expressions "reviewing studies," "going over the work," or "being put back in classes," have had a tolerably fixed meaning among school teachers, parents, and pupils from time out of mind. In order to appear semi-scientific, the word "retardation" has been quite recently plucked out of physics and is now made to do duty in indicating the rate of speed that a pupil makes when, for any cause, he is hindered or delayed in his studies, thereby causing him to lose time. In a potential sense, however, a pupil may be regarded as an unorganized, or partly organized, mass of humanity, supposed to move over a definite part of a subject in a given time at a uniform or variable velocity, owing to rough places on the track, or up-grades on some of the curves. Consequently the pupil's speed may be uniform, accelerated, or retarded, owing entirely to the circumstances or conditions of motion. However, I disclaim, at the outset, any intention of laying down a law too large for the subject and applying it to the pupil before he reaches a point in his progress prior to any beginning in his studies. Children of foreign birth have not been included in this paper because, so far as I have observed, those who had received instruc-

tion in another country have made very rapid progress in all their school work, sometimes covering three or four grades in a year in our schools.

Consequently, "retardation" as dealt with in this connection has simply to do with the pupil's progress in his studies as a pupil after he is once regularly installed as a pupil in school. It does not take into account his age, environment, and such other accidental qualities of his condition, except incidentally in studying and in explaining his history as a member of the family or social group. If his parents deem it wise to keep him out of school until the compulsory law would force him into school, then the question of retardation or acceleration would begin soon thereafter to operate. The forcing of a pupil into school as soon as a certain number of revolutions of the earth around the sun has been made is not a proper means of finding a starting-point for investigating whether he is able to keep up with his classmates, or will fall behind them. Retardation, except in a very remote way, is not a problem of years, months, and days, but one of educational velocity after one starts to school, and it should be estimated on his rate of speed thru his studies.

It may be the very best thing for a child to be kept out of school till he is eight or ten years old, rather than to start in at six, because good health is most important. When a child shall start to school is a question of expediency and of balanced judgment. It frequently happens that the child that is put to school work later in life moves forward with an accelerated velocity unknown to those who step just so far each year. Furthermore, I am clearly of the opinion that there is not so great danger in keeping children out of school till they are eight or nine years of age, as there is in putting them into school at five or six; provided they can have a good place to play and run about outdoors and grow strong and vigorous. After a pupil is once entered in school, no matter what his age may be, and he does his work in the time allotted to his class, or in a shorter period, that pupil is not retarded in his studies, and should not be so counted. The school is not a race-track upon which all four-, five- or six-year-olds must be brought out and started at the same time, and all who do not thus start, or reach the goal, at the same moment, must be classed as retarded. Children never have developed that way, and I venture the assertion that they never will.

As our courses of study are made out in all institutions of learning, the time element figures as the dominant factor in all of them. It is tolerably well known how much time will be required for the elementary, the high school, the college, or the university pupil to complete a prescribed course of study. If it happens that he can not keep up with his classmates for any reason, and he must devote a longer period of time to the course, he is certainly retarded. This is so clear that I do not believe it is susceptible of any other interpretation.

However, from some recent reports that I have read, the basis for retardation is the age of the pupil instead of his mental and physical attainments. By this system of measurement, all pupils, say from six to seven and one-half

years, belong by necessity to the first grade, and so on thru the other grades or forms. This may be called the official schedule. If it should so happen that one older than the limits prescribed should be found in another group, he is retarded, and is therefore slow or behind in his class standing. Mind-growth can not be measured that way in advance.

THEORETICAL DISTRIBUTION OF PUPILS IN THE GRADES COMPARED WITH THE ACTUAL DISTRIBUTION

There is such a thing abroad in this land as building a theory and then hunting for facts to prove that theory. Some years ago I called attention to the fact that in the best organized systems of city schools in this country the ages of pupils in any one grade, owing to various causes, varied from five to eight years, and occasionally as much as ten years; but that a large percentage of the pupils in any one year's work, from the lowest primary to the fourth-year class in high school, would be of the same mean average age as demanded by the organization; that mean average counted for little when each should count one. In a year or two after this announcement was made public, a few city superintendents instituted similar investigations, and every investigation, whether in a large city or a small one, has confirmed what I had found to exist in my own field of work. Each year the superintendents' reports indicate an increasing interest in the problems of school organization and the distribution of the pupils by age in each grade, and this same kind of classification holds good in all technical and higher institutions of learning, even including the military and naval academies.

Just at this point is a very serious sociological question involved: whether having all the pupils in a class or grade practically of the same age, say not more than an extreme limit of two years, is the best possible condition for the pupils themselves. In the German schools the age limits in the same class are not quite so pronounced as in this country. Frankly, I do not believe that there is a common measuring unit that can be applied to either the power or the intelligence of children or grown people when the revolution of the earth on its axis is taken as the unit of measurement. While exact and vigorous compulsory laws would perhaps decrease the maximum spread in the ages of the pupils in each grade, the general effect would not all be on the right side of the balance sheet. But with the elastic system of promotion in vogue in nearly all well-organized schools in our country, there is no valid reason why over-aged or under-aged pupils should be kept marking time in any class or grade if they can do the work in a higher class or grade. Elastic promotion will, if liberally used, help to equalize, adjust, and smooth out irregularities. With a rapidly increasing school population where conditions are unstable and the citizens are leaving the rural districts to live in town, no very definite conclusions can be drawn from school statistics except to indicate a general trend. The depopulation of the rural school districts in many states bears a striking testimony to the fact that the American people are lively movers.

WHAT IS MEANT BY THE PROMOTION OF A PUPIL?

From forty leading cities in the United States I have replies to this question. Promotion of a pupil in one city means a very different thing from what it does in another. In a majority of the cities, a pupil who has done acceptably a half-year's work is promoted once, and if he does a whole year's work he is promoted twice; in other cities, again, if he does a year's work he is promoted once, and if he does only a half-year's work he is not promoted, because the unit for promotion is a full year's work; but in other schools that are organized on four terms per year, a pupil may be promoted at the end of each ten weeks. Then there are irregular or special promotions which need not be considered in this connection.

As we read of promotions in school reports, it is seldom clear just what is meant unless we know precisely the practice of each city. There ought to be an educational nomenclature so that we may know, when examining school statistics, what value to attach to each statement. When we read that out of a total enrolment of 272,311 pupils, 183,977 were promoted, it would be more satisfactory to know whether the number promoted did a full year's work, or whether some did it and others completed only a half-year's work. I submit that it would be more intelligent in making up the school statistics each year to give the number who did the whole year's work, two-thirds of a year's work, a half-year's work, and so on, in order that we may have a uniform standard of measuring the pupil's progress thru a school system, since a promotion may mean anything from a fourth of a year's work to a full year's work under the prevailing systems of bookkeeping. In the German elementary schools, if a pupil does a year's work according to the schedule, he is promoted once, and it is estimated that 90 per cent. of the pupils do this work, and are thus promoted.

A SPECIAL INVESTIGATION OF THE PROGRESS OF 1,957 PUPILS THRU SCHOOL

Just before the close of school in June of last year, I made a special investigation of the individual histories of 1,517 pupils who completed the elementary course in the Kansas City schools, and of 440 pupils who had completed the elementary and also the high-school course, thus making a total of 1,957 different pupils. There were 1,581 of the elementary pupils, but 64 were not present on the day the report was handed in. The elementary pupils included 682 boys and 899 girls, and of the high-school graduates 149 were boys and 291 girls. Of the elementary pupils, 325 had attended kindergarten—most of them for the full term—but under the constitution of Missouri no money can be used for the education of children before the age of six, hence no time in studies was gained by attending kindergarten. Neglecting the kindergarten time, the investigation showed that of the 1,957 pupils, 231 had completed the elementary course in less than seven years, 895 in seven years, 59 in seven and one-half years, 557 in eight years, 18 in eight and one-half years, and 189

in nine years. Throwing these items into simpler form we find that 12 per cent. completed the elementary course in less than seven years, 46 per cent. in seven years, 3 per cent. in seven and one-half years, 28 per cent. in eight years, 1 per cent. in eight and one-half years, and 10 per cent. in nine years.

Now since the course is seven years in the elementary schools, it is only necessary to deal with those who required more than seven years to complete the course, and to ascertain the reasons for overtime in doing the work. It will be observed that the number who completed the elementary course in eight years is counted as behind time, although they number 616 out of a total of 731. That is, all the pupils except 115 out of 1,957 completed the elementary course from six to eight years, while 115 required more than eight years to do the prescribed work. But I deem it pertinent to this inquiry to make a classified list of those who took more than seven years for the elementary work, because this exhibit throws a good deal of light on the topic under consideration. Each individual case was carefully investigated and placed in one of the following groups:

1.	Time lost on account of sickness.....	268
2.	" " " " " " changing schools.....	193
3.	" " " " " " reviewing school work.....	143
4.	" " " " " " absence.....	40
5.	" " " " " " having to work.....	12
6.	" " " " " " lack of interest in studies	15
7.	" " " " " " weak eyes.....	3
8.	" " " " " " defective speech.....	2
9.	" " " " " " no reason assigned.....	35

An analysis of this table leads me to conclude that sickness is the most potent retardation factor when schools are elastically graded; that the removal of parents from one school district to another is two-thirds as strong as the retardation caused by sickness; that the present system of holding back classes or pupils to review certain studies is half as strong, as a retardation factor, as is sickness; and all the other factors are very small in comparison with these three essential factors. I await further investigation along the lines indicated.

SUMMARY

1. That children really old enough to attend school regularly and of average intelligence will do the work of the elementary schools on schedule time, whatever that time may be.
2. That the greatest hindrance is sickness, which by intelligent medical supervision may be materially decreased.
3. That a system of more careful examination, and of placing children in classes where they properly belong when they are changed from one school to another, would greatly lessen the second item.
4. Efficient and progressive teaching is the correct remedy for the second and third.
5. The other items are merely incidental, and must be treated accordingly.

DISCUSSION

ROLAND P. FALKNER, agent in charge of school inquiries, Immigration Commission, Washington, D. C.—It is mainly to the question, "What Is Retardation" that I shall address myself, leaving the discussion as to how it is to be met to men of wider experience than my

own. To the onlooker recent discussion of the subject might well appear as a curious compound of exaggeration and indifference. On the one hand he reads that large proportions of the children in the schools are behind the grades appropriate to their ages. I would not make any invidious comparisons, but I hold in my hand a list of twenty cities in which from time to time computations of the number of over-age pupils have been made. These calculations, not always uniform as to time and method, show percentages running from 18.5 in Boston to 60.1 in Erie, Pa.

These figures further show plainly the cumulative effect of failure. Thus, for instance, in Kansas City in 1906-7 the over-age pupils are 25.2 per cent. of the first grade, but 64 per cent. of the fifth grade. Or, if we consider ages, we find that of the eight-year-old children who should normally be in the second grade, 34.9 per cent. are below that grade; while of the thirteen-year-old children who should normally be in the seventh grade, 78.7 per cent. are below that grade.

On the other hand we hear an occasional protest that the methods used to determine the amount of retardation are erroneous, with the implication that the problem is not so serious as it appears. Again we are told that the problem is not a new one, that the condition of affairs described has long existed. More frequently the voice of the critic is listened to with a respectful but none the less impressive silence, to which there is no answer except reiteration.

It may be admitted that the problem is not a new one but that does not make it less real. If an old problem, it is in our day freshly perceived and newly expressed. This new expression warrants us in taking cognizance of it.

Of more weight is the suggestion that students have wandered astray in their methods, with its implication, if not assertion, that they have thereby been led into exaggerations. With this possibility in view it becomes more important to review fundamental concepts and ask ourselves, "What Is Retardation?"

Technical terms are not always self-explanatory. They acquire conventional meanings as well as their obvious significance. To express a certain result which we find in our schools we have borrowed the term "retardation" from one—the most important—of the processes by which that result is reached. So far as there is a difference of opinion among those who have thought and written on this subject, it arises from the fact that one emphasizes the result, and the other the process. The result referred to, however caused, is a disparity between the ages of children in the schools and the grades in which they are found. The process referred to is the failure of pupils to secure promotion and thus a slow rate of progress.

Commenting on some very excellent work of Dr. Cornman, of Philadelphia, Superintendent Greenwood, of Kansas City, voices his dissent as follows:

The only correct way to estimate retardation or the slow movement of a pupil is the length of time it takes him to do a year's work. It is not a question of age without respect to progress, but it is one of time required to do a given amount of work within a specified time without regard to age. Suppose two boys enter college, one sixteen years old and the other nineteen, and each one completes the four years' work on time. Now, would anyone claim that the older one was retarded? So, if a child begins the regular grade work at eight and he does a full year's work each year till he completes the elementary course, that child is not retarded, and it would be puerile to class him as a backward pupil. The only clear cases of retardation are those in which pupils are kept longer on a certain unit of work than is prescribed in the course of study. Many intelligent, sensible parents, especially in the middle and western sections of the United States, prefer not to send their children to any kind of a school till the age of eight, and where such children do enter school they go forward rapidly and easily in their studies, often skipping classes.

We may designate these two standards respectively as those of age and of progress, and I would plead for the validity of the more inclusive or age standard. In so doing I would call your attention to the significance of retardation which we must consider from two points of view: that of the school, and that of the child.

From the standpoint of the school the significance of retardation lies in what Superintendent Greenwood, with his characteristic aptness of expression, terms "the spread of the ages." For efficient instruction in our schools the "spread" of the ages is altogether too broad. Teaching suffers when it is directed to heterogeneous hearers. The child of ten years, no matter what his instruction or attainment, feels himself out of place beside a child of seven. It does not seem to me to require argument before an audience of educators that a nine- or ten-year-old child is out of place in the first grade, and because he is out of place, is a nuisance in the class and an impediment to the work of the teacher. From this point of view is it very material whether the child is in the first grade because of failure to be promoted from it or because unwisely indulgent parents, with the sanction of high educational authorities, have kept him out of school till he was nine or ten years of age?

From the standpoint of the child the significance of retardation lies in its outlook to the future, in the amount of schooling which he can reasonably expect to get in the future. Few, very few, children remain in school after they are fifteen years of age. For the great majority, the possibilities of an education are measured by the amount which they can get before they reach this period of life. A child who enters at six years of age and has no interruptions in his study can be ready for the high school at fourteen, but one who enters at nine cannot reach it till three years later. The chances are that he will never reach it. Any child in the first grade who is nine years old has much more limited prospects for an education than one who is six years old. Again, from this point of view, it makes but little difference whether the child grew to be nine years of age while attending the first grade or whether he grew up outside the schools, and first entered when he was nine years of age.

But Mr. Greenwood would have us believe that so far from being a disadvantage, a relatively late entrance into school is a benefit to the child. In one of his articles he says: "I would rather a little youngster of mine played in a green pasture in pleasant weather, dressed in a little slit-shirt, than to be dressed in knickerbockers and a frilled shirt, and to sit much of the time in a beautiful schoolhouse with his hands folded and 'being good' while his educational food is being chewed for him, and then having it fed to him with a spoon."

Now I assume that there are none of us who, either as parents or pedagogs, are so austere that we would willingly curtail the innocent joys of childhood. We might be very well disposed to incline toward the view here expressed, if our cities afforded, as Kansas City appears to do, an opportunity for its youngsters to wander in their sylvan dells, and kick their heels and gather buttercups and daisies in their green fields.

Mr. Greenwood admits an initial disadvantage for the young child who has had the benefit of these rural advantages, but contends that he can make it up. But can he do so? How many of our schools are arranged to facilitate a rapid progress thru the grades? In another place Mr. Greenwood says: "There is not today an elementary course of study in the United States, but that a boy or girl nine or ten years of age, if turned loose on it and permitted to go ahead, would not complete it in three or four years." But is the child turned loose upon the course of study, and is he permitted to go ahead? If there is in our schools any considerable number of pupils capable of advancing more rapidly than the course provides, statistics of promotions do not reveal their existence.

Rapid progress thru the schools is represented by promotion over more than a grade and by promotions during the term. These constituted in Somerville, Massachusetts, in 1907 exactly 1.4 per cent. of all promotions. Again in Springfield, Ohio, where we have a record of 4,755 promotions, there were only 7 pupils who were promoted more than one grade. In Philadelphia among 122,644 promotions, 2,406 are described as incidental. In the investigation conducted by the Russell Sage Foundation in New York City, Mr. Ayres found complete records for 949 pupils in the fifth grade. Of these only

51 or a fraction over 5 per cent. had progressed more rapidly than the progress of the schools contemplated.

In the same article in which he directs the shafts of his satire against the "anti-retardation incubators" he quotes some names famous in history—Sir Isaac Newton, Adam Clark, the great Methodist commentator, George Washington, and Sir Walter Scott—as men slow of learning in their youth and "retarded" by the modern acceptance of the word. But may we not in turn ask whether there is any evidence that these distinguished men ever attended a graded school?

But enough of pleasantry. It appears clearly that the result is more important than the process, that age is a more forcible criterion of retardation than progress. We may admit some verbal incongruity in deriving our general designation from only one causal element, that of progress. But if we stop to consider progress not as the ground actually covered but as the relation between attainment and opportunity, there can be not the slightest objection to considering as retarded a child who has neglected his opportunities, and who by a late start is already far behind his fellows in the race.

But what of the implication that the age standard exaggerates conditions? If there were a reasonable doubt as to its propriety, the question would then mean how large a part of age retardation is ascribable to late entrance into school. Obviously this factor cannot grow. It is fixed from the start and is found as an original proposition in the first grade only. Now let us take again an illustration from Kansas City. In the first grade there are by the age standard 25.2 per cent. retarded. In 1907 there were 1,232 pupils who had been more than 200 days in the first grade. If this is properly comparable with the total enrolment, it amounts to 15.9 per cent. who are retarded by lack of progress. Hence, in a total retardation of 48.5 per cent. in Kansas City schools by the age standard, there is 38.5 per cent. caused by failure and 10 per cent. by late entrance.

In New York City, Mr. Ayres found that among 100 retarded children by the age standard such retardation was due to a late start in only about 30 cases. If there is any reason then for eliminating late start as a cause of retardation, it would leave us with a volume of retardation about one-third less than that currently reported.

But suppose we apply the progress standard pure and simple. It is difficult of application because records of the number of years in school are not frequent. In the one hundred largest cities there are only five in whose reports I find the slightest information upon this subject. In Cambridge we learn that 35 per cent. of the pupils fail to complete the primary grades in three years, the allotted time. There are no age figures for Cambridge, but in neighboring cities, with similar conditions, we find a retardation by the age standard in the fourth grade of

28.0	per cent.	in Springfield
27.6	"	" Boston
7.7	"	" Medford

In Boston, in 1897, 46 per cent. of the pupils took more than the regular time to finish the primary schools, while the percentage of age retardation in the fourth grade was only 29.3 per cent. In the same city in 1894, 34.5 per cent. of the pupils took more than the regular time to finish the grammar grades, while the percentage of age retardation in 1896 was 20.0 per cent. for the ninth grade.

Again in Somerville, in 1907, in the graduating class 36 per cent. took more than nine years to complete the course. No age retardation figures are available but it is doubtful whether they differ greatly from Boston where the age retardation in the ninth grade was 16.3 per cent. in the same year.

Other figures available such as those printed in Kansas City do not give cumulative retardation but only retardation which has occurred in one year. If the figures given are comparable with the total enrolment, we had in 1907:

First grade	15.9 per cent.
Second grade	13.8 "
Third grade	19.5 "
Fourth grade	26.3 "

75.2 per cent.

But if these be the proportions who fail in each grade, the whole number who have failed by the time they have reached the fourth grade must approach the sum of these, or 75.2 per cent. Now the age retardation shows only 67.4 per cent. in the fourth grade.

In Baltimore we learn that of 45,085 pupils, 12,246 are more than ten months in their grade, a percentage exceeding one-fourth. It can be readily seen that in a series of years the accumulated retardation would be considerable.

We therefore see that wherever there is an opportunity to test the relative results of the two methods, the progress standard invariably gives higher results than the age standard. This should absolve the advocates of the age standard from the charge of exaggeration.

Moreover, those who have employed the age standard have been generous in its application. Very seldom has it been so rigorously applied as in Medford, Massachusetts. In that city many children enter school at five years of age, and hence the superintendent takes five years as the normal age for the first grade. Calculating all above five years in the first grade as above normal age and using corresponding figures in the upper grades he discovers that out of 4,036 school children 3,423 or 84.8 per cent. are retarded. But this is a strained and unusual application of the age standard. Generally any child under eight years in the first grade is considered of normal age, and those of eight years and upward are considered as above normal age. For those who enter the first grade early, say at six, this allows for one failure, or, by half grades, two, before the child begins to be counted as retarded. On the other hand any pure progress standard makes no such allowance. Hence the percentage of retardation as measured by the age standard as commonly applied instead of being greater is always less than when the progress standard is used.

To sum up: the amount of retardation has not been overstated in current discussion. It is prevalent everywhere. Because of the impediments it offers to the forcefulness and effectiveness of teaching, it is one of the most serious questions of school management. Because it is depriving our children of a part of the education which the state provides for them, it is most serious for the prospects of the future citizens. It is an old evil, newly stated. Every effort made to diminish it will redound to the benefit both of school and children. Concerning its causes we are yet much in the dark, but who can doubt that out of the continued study of this greatest of problems of our school administration will arise practical measures which will not abolish the evil, but will greatly lessen it.

J. A. KOONTZ, superintendent of schools. Carrollton, Mo.—The amount and kind of work done by a school depends very largely on what is demanded. This may account for the results in Kansas City. The authorities there expect great things and they are not disappointed in their expectation.

There is but one kind of instruction. If the individual is not reached there can be no instruction. There must be *contact* between teacher and pupil and not mere association.

Dr. Arnold Tompkins said, "The school is a spiritual union between teacher and pupil." My contention is that there can be no teaching without this union, whether the class consists of one or of many. There is a distinct advantage in good class instruction, but good class instruction presupposes a unity of thought between the teacher and each individual pupil. The teacher who permits the individual units of his class to go wool-gathering is lacking in the essential elements of a teacher.

How, then, may this spiritual union, this vital personal contact, be maintained?

In the first place, the teacher must command attention by his downright earnestness. He must ring true. A strong personality is, as a matter of course, essential. Each pupil must, somehow, come to feel that that teacher means him; that it is a personal matter

between himself and the teacher; that it is all for him. Takes energy and vitality? Sure, it does. But it is necessary to real success, and what true man or woman would not rather wear out than to rust out!

In the second place, the teacher must have an objective point in every lesson. He must know what he is going after before he starts, and then starting from the child's view-point move steadily and clearly toward the objective. Inattention is too often encouraged by inefficient, aimless, purposeless teaching. The lesson without a definite purpose may well be omitted. Purposeful teaching will, to a large extent, solve the question of *fundamentals* and many other vexed questions connected with the course of study. Granting the force of Dr. Meriam's view-point in the course of study, could the average teacher of today use such a plan successfully?

Modifications in the curriculum will of necessity come. There may be, and probably will be, elimination; there may be, and probably will be, addition, as there has been, but we need not be alarmed. Thru it all there has come, and must still further come, *simplification*; and this is the third essential element I would emphasize for this unity in class work. But the most effective simplification is, and always will be, thru the teaching process. All great teachers have been simple teachers; the great Master Teacher was the soul of simplicity. With the good teacher there is little ground for complaint with the present day course of study. The problem of waste is not here a serious consideration. But with the poor teacher no course of study can be a success. No outward rules or regulations, no plan of tutorship or other device can take the place of the real teacher. Hope for improvement lies in the improvement of the teacher, and in definite, purposeful teaching.

SAMUEL HAMILTON, superintendent of schools of Allegheny Co., Pa.—I have listened with great interest this morning to these papers on elimination of waste, and especially to the one on retardation by our venerable friend from Kansas City who claims that the elementary-school course can easily be completed in seven years. I have great confidence in his judgment, and yet in this conclusion he is either right or wrong. If he is right, this body ought to know the secrets of his success, for in that case to take eight years is to commit a crime against childhood; if he is wrong, we should know it, so that we may turn aside from his leadership at this point.

There are three conditions under which the elementary-school course may be completed in seven years:

1. By superior organization, flexible gradation, and expert work in the classroom.
2. By eliminating much of the difficult subject-matter from the course and presenting it in the high school.
3. By a low standard for advancement from grade to grade.

Would it not be wise, then, for us to send a commission to Kansas City to ascertain upon which of these three conditions the work is completed in seven years, and to report to this body next year?

Retardation is a timely topic for discussion; but in my opinion it is not so prevalent in practice or so detrimental in its effect as acceleration or undue haste in the grades. The student of modern education is likely to arrive at three somewhat definite conclusions:

1. There is a marked tendency to sacrifice quality for quantity.
2. This sacrifice, in the elementary school, is due to the crowded curriculum and the early age at which it must be completed; in the high school, it is due to unreasonable quantitative, rather than reasonable qualitative, college-entrance requirements.
3. The results of this sacrifice are detrimental to the child's physical well-being, to his mental and moral life, and to his worth as a citizen.

A low standard for advancement from grade to grade is the keynote of this sacrifice of quality to quantity, and its justification is somewhat doubtful. Modern psychology seems to indicate that a child gets two kinds of discipline from a study—one special, the other general. The special discipline is the power to peruse that study or some study

closely allied to it. For instance, the special discipline that comes from the study of algebra is the ability to study algebra and other allied mathematical subjects such as geometry and arithmetic. This special discipline is largely the result of two factors: first, a knowledge of the facts and principles of the subject; second, the ability to use them to practical ends.

The general discipline that is derived from the study of a branch is the power that may be used in any field beyond the one or the related one in which it was acquired. Thus the general discipline derived from the study of algebra is not the power to pursue that, or allied studies, but rather the general power that may be used in biology, language, or in any field of human endeavor.

Psychologists practically agree that this general discipline is so limited in quantity that it is not sufficient upon which to base the doctrine of formal mental discipline. If they are correct in their conclusions, then the only discipline worth while that the child gets from the study of any branch is this special discipline, that is, a knowledge of its facts and principles and the ability to use them. And consequently if he is promoted up thru the grades upon a low standard for advancement, he gets very little return from the course.

Low standards for advancement are not easily justified. No bank wants a clerk who is 40 per cent. accurate, 40 per cent. truthful, and 40 per cent. honest, and possibly there is some relation between low intellectual and low moral standards.

TOPIC: ARTICULATION OF HIGHER EDUCATIONAL INSTITUTIONS WITH SECONDARY SCHOOLS

I. THE RELATIONS OF THE UNIVERSITY TO THE SECONDARY SCHOOL

STRATTON D. BROOKS, SUPERINTENDENT OF SCHOOLS, BOSTON, MASS.

It has been said that the university should be the nurse of scholarship and the mother of men. The service that the university has rendered to humanity in conserving, protecting, and expanding scholarship is immeasurable. There is and there can be no greater community service than the production of men of the profoundest scholarship. And if our discussion today causes us to lay emphasis on the mothering of men, let us not be forgetful that this service can be performed with highest efficiency only when the university best performs its functions as the nurse of scholarship.

The purpose of promoting scholarship is that the results of scholarly research may be useful to mankind or serve to increase the happiness of the race. The professor in his laboratory may work for years and the world cares little whether he lives or dies. But what an awakening when the morning papers flash across the continent the news that a serum that will cure pneumonia has been perfected. What a contribution to human advancement! What an increment to human happiness! What a monument to human patience! What a triumph to the university that has given the opportunity that results in such achievement! To name the benefits to mankind for which the scholarship of the university has been directly or indirectly responsible would be to define the limits of civilization.

Nor should we forget that it is likewise the province of education to open to mankind avenues that lead to the greatest pleasure of which he is by nature capable, and that the contributions to human happiness for which the scholarship of the university is responsible are in extent and value comparable with its contributions to the material welfare of mankind.

But it is one thing to discover a fact or a principle that will affect the welfare and happiness of a nation. It is quite another to weave it into the daily life of millions of people so that its highest possibilities for pleasure and for profit are attained. It is for this purpose of making the marvelous product of the scholarly research of the recluse in his library or his laboratory today, the commonplace and daily practice of millions tomorrow that the university must become the mother of men. Scholars are rare and remain to a great degree upon university faculties. Men are plentiful and go everywhere and the great problem of the university is to send forth men so trained that the results of all scholarly research may find the largest fields of influence for the betterment of conditions of life and living.

And it is more than sending forth men. It is the creating of vital, palpitating, regenerating influences that vivify and invigorate the whole life of a community. The graduates of a university number a few hundreds. Those who come under its direct instruction reach a few thousands. But those who are affected in life and living by the pulsating heart-beats of a live, vigorous, forceful university spirit, include millions upon millions, many of whom may not even know that such a university exists.

The danger is that in the pursuit of its scholastic ideals the university may forget its duty to the present; that in attempting to preserve the standards of scholarship that have dominated the world's history, and in its endeavor to discover hitherto unknown bits of knowledge, it may forget the vital necessity of relating these two into an active, energetic and controlling force over the lives of men now living. Its pioneers may push forward the boundaries of knowledge but forget to send back messengers to show the people the roads that lead to the newly conquered kingdoms. Its antiquarians may roll back the curtain that veils the past achievements of humanity but neglect to report that they have discovered material of value in the moral, material, and civic progress of the generation of today.

In the early colonial days the greatest need of the community was for men trained in those professions for which the best of cultural preparation was most useful, and the colleges of those days were founded and conducted for the purpose of supplying those needs. At that time secondary schools were established almost for the sole purpose of preparing pupils for admission to college, and the secondary-school course was in effect but part of one continuous course leading to an education that we now denominate cultural. It was therefore natural that the college should dominate the secondary school, or rather let it be said that those who were in charge of secondary schools so framed the work therein that it would best meet the purposes for which those

schools were established. History has shown that the graduates of colleges were well equipped for the successful performance of the duties of their professional careers, and so by inference we may state that the secondary schools satisfactorily performed their work as preparatory schools.

Today the university still has large duties to perform in supplying the community with professional men of every type, but it has taken up the broader duty of preparing all men for better living; of assisting all men in solving the problems of life that confront them. It gives attention to every phase of community life, and studies with care every resource of the community it serves, whether spiritual, intellectual, or material. It goes upon the farm to teach the farmer how to improve the quality and quantity of his crops. It studies the mines, the forests, and the streams that each may give a more abundant product. It goes with that product thru every process of production, manufacture, and transportation, and endeavors at every point to improve the old or devise a better new. It enters into all the broad problems of life and living. It endeavors in every way to assist in the social, moral, and civic betterment of the nation. The enormous amount of time, energy, and money that are expended by some of the universities of this country upon problems connected directly and indirectly with the daily life of the people could scarcely have been conceived of as within the proper function of a university of a generation or two ago.

Marvelous as has been the expansion of the university, it has been but slow and slight in comparison with the changes that have occurred in secondary schools. The number of high schools has doubled and trebled almost overnight. The yearly expenditure for buildings, equipment, and teachers is enormous. The number of pupils has increased beyond all expectation.

More important than the change in numbers is the change in function of the high school. Today the high school is primarily and fundamentally related to the immediate needs of the community; and its chief purpose is to give its graduates a training that will have large elements of immediate vocational value. Thousands upon thousands of high-school pupils are going forth yearly to become the producers, the manufacturers, and the transporters of the community. Other thousands are filling public offices and performing public service of every kind. It is comparatively only a few that find their way to college in line of preparation for professional service. The chief business of the high school of today is to train its boys and girls for immediate participation in the community life, to prepare them to become citizens, capable of supporting themselves and defending the government—or rather of becoming themselves the government—carrying forward all the uplifting influences of our present civilization.

There was a time when we said that education should contribute to the mental, moral, and physical welfare of the individual. Today we are giving consideration to a fourth item; namely, the social service of the individual, and we are inclined, in our definition of education, to place a greater emphasis upon the preparation of the individual for helpful and happy service.

Neither university nor high school is exempt from the obligation of preparing the youth of the nation for intelligent participation in the civilization of the present time and their mutual relations must be determined by the dominant purpose of each. A change in the scope or methods of either must of necessity be accompanied by a readjustment of the relations existing between them. It is because both the university and the high school are rapidly enlarging the amount of education for service that a readjustment of their mutual relations is desirable.

In considering the relation that must exist between the high school and the university, it should be repeated that the prime purpose of the high school is to prepare for service in the community, and that the prime purpose of the university is *also* to prepare for service in the community in similar tho in higher lines. In other words, the high school of the present day is fundamentally and almost exclusively a vocational school, and the word "vocational" is used here meaning that the graduates of the school go immediately into the occupations of life. The university likewise, in a large proportion of its functions today, is also a vocational school, preparing men to go upon graduation into active participation in the businesses of living. It seems therefore that the day is at hand when those who control requirements for admission to the university must recognize the upper vocational schools as extensions of the lower vocational schools, just as the university has always recognized that the upper cultural schools are extensions of the lower cultural schools, and that requirements for admission to the university in those courses of vocational purpose shall be so framed that the boy who has pursued courses in the high school of similar purpose shall find open to him a path of admission to higher instruction in the same line.

The ideal school of commerce should sort out from the boys of the community those whose tastes and aptitudes are such as to interest them greatly in commercial work, and whose abilities are such as to insure success therein, and the work of the school should be dominated with the idea of giving the greatest possible vocational efficiency to the largest possible number of boys. Under any condition, a very great proportion of all the boys attending such a school will go directly into the business of commerce, or of transportation; but for those whom ambition and opportunity lead to seek preparation for the higher fields of commercial endeavor, there should be easy transition to the higher schools of training along commercial lines.

In a similar way, if a technical high school is established in a community, its pupils should be those whose aptitudes and desires lead them into mechanical work. Let us assume, perchance, that reasonable success has been attained in segregating in such a school all the boys of a given community whose purpose it is to enter into the fields of mechanical production. Shall we then say to these: For you there is no higher field. When you graduate from the technical high school, there is no opportunity for further technical training open to you. You must then go to work. If it is your desire to

attend a higher engineering school, you have started wrong. You must attend a classical school and be prepared along the traditional lines of college admission.

Strange that such a condition should exist? To be sure it is strange, but unfortunately it is so, and, more unfortunately, there are men who have control of schools who believe it ought to remain so. I, for one, wish to voice my protest against the conservatism which fails to recognize the advancing needs of the present time.

The modification that seems necessary at the present time is the waiving of uniformity; the abandonment of the feeling that one set of requirements for the university shall govern admission to all colleges and to all courses therein. From personal knowledge I know that the establishing of an elective system of admission by the University of Illinois has done more to expand the high schools of this great state, or rather, I may say, has done more to give them the opportunity of expansion, of which they have themselves availed, than all other influences put together. The university said years ago thru its personal representative to practically every principal in this state:

The chief purpose of your high school is to prepare the boy for the business of making a living, and the university believes, on the whole, that it will require as good a training to make him a success in life as it will to make him a success in the university. We propose, therefore, to leave you free to determine the needs of your community and to prepare your boys and girls for success in that community. We shall then admit them to such courses in the university as will best supplement the education you have given them, and best fit them for larger spheres of influences and of service.

Under such a system, both university and high school have been free to make every effort to meet the most urgent of community needs and both have grown in numbers and in usefulness at a rate that seems quite unaccountable to our conservative brethren of the East.

Of course, it is not to be expected that pupils who have been trained in non-classical subjects should expect admission to classical college courses; but the difficulty is that there is still required, even for admission to the vocational courses of many universities, the training that is required for admission to the classical and cultural courses.

Many men in the university itself who are charged with determining what the relation between the university and the high school shall be have not observed the general trend of the university life and purpose. Being themselves concerned with special departments, whose purposes and ideals have not changed and ought not to change, they have failed to perceive that the university is taking upon itself a function a thousand times broader than it used to perform, and that the high school has likewise taken upon itself a function more intimately connected with the life and purpose of the community than has hitherto been the case.

I believe that there should be a readjustment with reference to the responsibility for the success of the boy after he enters the university. Under some

of the certificate systems now in vogue, the responsibility placed upon the high school is too great, and many a boy who would have greatly profited by university instruction fails to secure admission because the principal is unwilling to assume the responsibility for possible failure in the college work. On the other hand, under some of the systems of examination, the responsibility placed upon the high schools is too little, and many boys secure admission by processes of cramming that have no real basis for substantial achievement, but on the contrary breed wrong conceptions of scholarly standards and wrong habits of working and thinking.

The decision as to admission should be based upon the unofficial, or at least unsystematic, judgment of the principal. By this I mean that no schematic arrangement of percentages or subterfuges or reports should take the place of the real judgment of the principal, based upon daily contact thru four years of a secondary-school course, from which he concludes that the pupil will or will not succeed in the more difficult phases of college work. While for purposes of accrediting, some schematic arrangement may be necessary, and some statement showing that a certain number of hours have been devoted to history or mathematics may be unavoidable; yet what is needed is the personal element which causes the principal to write at the bottom of the report, "This boy will, in my judgment, do college work acceptably." This judgment should not be formal and perfunctory, or lose weight because it is a printed statement, or be concealed in an elaborate certificate; but it should come directly from the principal himself in the full belief that such an expression of opinion is the full measure of his responsibility in the case.

Upon the university is to come the responsibility for giving to the young man such conditions of instruction and such surroundings in influence and in companionship that ideals of accomplishment shall be instilled, and that he shall be held to perform the tasks required by the university itself.

What is needed is a division of responsibility in which both university and high school shall have a share, but in which the boy himself shall have a larger part. There should be placed upon the boy himself the responsibility for success, and from the beginning of his high-school course until he stands upon the university platform in cap and gown, he should be led to feel that it is himself that is to succeed, and that it is upon him and upon him alone that the responsibility for success must lie, and it is by him and by him alone that the rewards of his success are to be reached and enjoyed.

It is left for others upon the program to discuss the details of the relation that should exist between the university and high school. In broad terms, it should be that of co-operative effort for community service. The university should neither abandon nor abate its efforts as the nurse of scholarship, nor should it, on the other hand, allow its scholastic ideals to restrict its influence as the mother of men. The university should provide instruction to meet every higher need of the community—cultural and vocational—and the high school should hold itself in readiness to furnish adequate preparation for admission

to such courses of instruction, both cultural and vocational. On the other hand, the high school must adapt itself to the vocational purposes of the pupils, and has a right to demand that the university shall establish the requirements of admission of such a nature that they will not interfere with the proper vocational function of the high school. Both schools are concerned with one consecutive and continuous process, and the establishment of admission requirements should mean nothing more than the determination of the point at which, with greatest profit to the community, ones should leave off and the other begin. For the proper solution of this problem, the essential consideration is mutual confidence, mutual co-operation, and sympathetic appreciation of the ceaseless changing of the conditions of both schools.

II. ARTICULATION OF HIGHER AND SECONDARY EDUCATION THRU TEACHING AND TEACHERS

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The last twenty years have witnessed great growth in schools for secondary and higher education. The attendance has increased at a rate not even dreamed of a generation ago. The course of study has been changed, improved, and enriched until it now offers such a wide and tempting range of intellectual food that even the most fastidious ought to partake fully of the good things offered.

In 1888 the enrolment at fifteen of the larger privately endowed colleges and universities was 9,880. In 1908 these same institutions had grown until they had a total enrolment of 26,873. Fifteen of the larger state universities in 1888 had a total enrolment of 7,952. These same institutions in twenty years had grown until their total enrolment was 42,859. The statistics of other schools of higher learning show like large increases.

In material equipment and endowment the growth since 1888 has been nothing short of marvelous. Private beneficence has given us Chicago and Stanford Universities and has added millions upon millions to the wealth of other schools. In the past two years alone about \$84,000,000 has been given by private individuals to educational institutions in the United States. State support to higher education has become the habit. Nearly all the states are now annually pouring large sums of money into their state universities.

The growth of schools for secondary education in the last two decades has been more wonderful than that of the colleges and universities. Their growth is the result of a change in the popular mind which has made the people want secondary schools and be willing to pay for them. Today every town of a few hundred people has its high school with a good building, first-class equipment, and well educated teachers. In many communities there is located at the crossroads the rural high school, better in every respect than the high school in the city of five thousand population twenty years ago. In many large cities

there are today high-school buildings, laboratories, libraries, and faculties superior in every way to those possessed by the majority of colleges two decades ago.

Everywhere there is great interest in both secondary and higher education. The belief is becoming more and more general that these institutions are directly and vitally related to the affairs of everyday life. The common people are pinning their faith to education in the hope that thru it they may lift themselves to higher levels.

The great growth of higher and secondary schools, their close contact with all the people, and the fact that neither school can exist without the other make the problem of close, easy articulation an important one. In the past there has been much adjustment, but most of it has been by the secondary school in order to fit the conditions imposed by the higher. This has very naturally caused considerable friction. There needs to be an articulation of the two schools that shall be mutually beneficial and especially helpful to the great body of students. This articulation should be such as to make the friction a negligible quantity.

In some states laws have been enacted making graduation from college, or its equivalent, a necessary qualification for the high-school teacher. Nearly everywhere public sentiment and custom are so strong upon this matter that no law is needed. Positions in high-school faculties are almost closed to all but college and university graduates. The secondary teacher of the future who is not a college graduate will be as rare as the college teacher who has no advanced degree. Secondary teachers of experience are feeling the pressure and are stopping out of teaching long enough to complete the college course.

The teachers of the secondary school are college men; many members of the school boards are college men; the textbooks are written by college men; the student games are played under the direction of college-trained coaches; the course of study is written by college men and to suit college requirements; the teachers are given the title professor by their students; the fraternities are organized by college *fraters*; the four classes are given college names; the sermon to the graduating class is called a baccalaureate, and on commencement day a distinguished orator speaks for the class. All this tells of conditions that may produce an articulation entirely unsatisfactory to the patrons of the lower school. It shows the possibility of the secondary school becoming a miniature college, having for its atmosphere air drawn from the lower layers of college life, and for its aim nothing more than preparation for college.

The friends of education should recognize this danger, but they need not be filled with fear nor become panic stricken because of it. The college and the secondary school are essential parts of American life. They are the best means yet discovered for multiplying the power of the individual. For the great majority the secondary school is the only power factory. This must be remembered in all work of adjustment between secondary and higher education. The lower school must be kept close to the needs of the people for it is their college and to most of them a finishing school.

A larger number of A.B. men and women become high-school teachers than go into all other learned professions combined. Every large college has its regular teachers' bureau to attend to location of graduates as teachers. A few years ago nearly every school board thought that the A.B. stamp on an applicant for a high-school position was equivalent to O. K. They are more discriminating now. The indications are that they will be still more so tomorrow. They now ask, "What particular preparation have you made for high-school teaching?" The answer, "I have taught in the grades and graduated from college" is no longer satisfactory. The belief is now general, indeed, it has become almost a conviction that the high-school teacher is made by a process very similar to that used in making a dentist, a doctor, or an engineer. The members of these professions must have broad scholarship, special knowledge of the field in which they work, and specific training under competent direction in the practice and art of their profession. Teachers of men should be equally well prepared before they are allowed to ply their calling.

This change of view by the managers of secondary education has had a marked effect upon the higher institutions. All the larger institutions have established schools or departments of education. Many of the smaller ones have done likewise and the others are making strenuous efforts to get sufficient money to do so. Quite a number of institutions are already equipped with model or practice high schools. In all these schools prospective high-school teachers study the history of education, principles of pedagogy, educational psychology, secondary-school problems, and special pedagogy of the subject they are preparing to teach. In addition to all this, those in schools having practice departments do considerable teaching under direction.

In order that the school or department of education may do work of importance for the student who expects to be a high-school teacher, its professors must be thoroly familiar with the field of secondary-school thought and practice. The aims, needs, and purposes of the high school must be known before specific help can be given to those who are to teach in it. As a result of this need a large number of college professors have become close and interested students of the high-school problem. They are working at the problem, not with the idea of getting a preconceived result, but as their scientific training has taught them to work at all problems. They are testing theories by observation and practice. They are making new theories in the light of collected data. They are trying to answer certain questions, such as: How should the high school be organized? What should its course of study be? How far should it go in giving specific preparation for vocation? What can it do to meet in a better way the specific needs of the community which supports it? Of course the answers to these questions must change with each generation. No fixed and permanent answers can be found. In the effort to find the answer means will be discovered which will make it possible to train more intelligently those who are to become high-school teachers.

In getting men to fill the various positions in schools and departments of education, great wisdom has been shown by the selection of many superintendents and high-school teachers. The addition of this sort of men to the university teaching force has made considerable change in faculty atmosphere. Many of us remember the scant courtesy with which the college faculty of a generation ago received the man who came into it from a secondary-school position. It was formerly a common belief that teaching in a high school unfitted one for a college professorship. It was supposed that the high-school experience made one "teachery," while one in a college position should be "professory"!

The feeling of antipathy between the two schools was not one-sided. Many high-school teachers were sure that the college professor could not hold a third-rate high-school job unless he improved his method of teaching. The transfer of high-school teachers to college faculties, together with the study of high-school problems by college men has already brought great improvement into the relationship of higher and secondary education. The schools and the men in them understand each other better. Because of the better understanding the relations are more cordial and the mutual reactions of each upon the other more beneficial.

The attempt of the university to prepare men for the profession of teaching exerts a salutary influence upon the teaching of the entire faculty. The department of education by its very existence makes the whole university take note of the fact that school problems are worthy of study. Much of the work of this department centers about the various kinds of teaching and points out that the quality may range from positively bad to excellent. The excellent is held up as the ideal before the students. The students soon become keen critics of their teachers. All this conspires to make even the poorest teacher recognize his weakness and try to improve. The professor who does not respond to this stimulus soon finds his classroom deserted by all students except those who are absolutely required to take his work.

Every school of education recognizes that in the making of teachers imitation plays a large part. Poor pedagogy can never entirely overcome the effects of the excellent teacher, and the best pedagogy requires much time to eradicate the evil results of bad teaching. The student who learns his Latin from a high-grade Latin teacher will not present many difficulties to those who are trying to train him for high-school work. The student who learns his mathematics from a dry-as-dust professor will be made into a good high-school teacher of the subject with the greatest difficulty. The recognition of these facts by the administrative officers of the university soon puts their influence alongside that of the school of education and together they work in favor of better teaching in every department of the university. Several good results will come from this. Better teachers will be made for the high schools and better men and women for all purposes. In time the great teacher will rank with the great investigator both in the estimation of the public and on the pay

roll of the university. Expert teaching will come into its own and will be considered as important as expert work in any other field.

Until very recently the higher institutions of learning have been interested in the secondary school mainly as a preparatory school. They exert their influence to have it shape its course of study for them. For years the response of the high school was all that the university could wish. It dutifully followed orders. That day has passed. There will be no more articulation of that sort. The influx of great numbers of strong men into the ranks of high-school teachers has given the high school a distinct place of its own. It is rapidly coming into a position to give orders rather than to take them.

In many of the colleges able men are studying the high school with a view of finding out how it can be made to serve its constituency better. In the high-school faculties well-trained, keen observers are at work on the same question. Between these men of the higher and lower school there is unity of purpose. They are all working to make secondary education meet the needs of the people better.

Partly as a result of this better understanding and partly as the result of necessity, college-entrance requirements have been greatly changed. The very large number of subjects now accepted for entrance shows the extent of the work done by the secondary schools and is a strong tribute to their high quality. The colleges have easily and readily adjusted their work to these new conditions. Everything runs as smoothly under the new régime as under the old. Larger numbers of young people are getting the uplift of college life. Indirectly the whole country is profiting by this widening of the door of opportunity. Back of this change of entrance requirements and its attendant benefits is the teacher in each school patiently studying the problem and earnestly searching for a solution that will benefit the people still more.

The present strong tendency of college men and women to enter the profession of high-school teaching is a hopeful sign for the better articulation of secondary and higher education in the future. These people, with their years of special training for the work, go into it to stay. They have selected it as a profession. They have paid too much for the entrance to be turned easily into some other field of work. The high school becomes their world, just as medicine becomes the world of the physician. It is of great importance that the boundaries of their world be pushed out, and so they become students working hard toward that end. In order to get the best results they must have the help of the university, and so they become allies of the department of education. In this way better co-ordination and finer adjustment are made possible.

The high school and the university are closely and peculiarly related. High-grade teaching in the high school increases the demand for good teaching in the university. First-class teaching in the university soon increases the number of good teachers in the high school. The expert in either field is sometimes called to the other in the belief that his field of influence will be widened. When the high schools seriously study the college-entrance requirements, the

colleges grow nervous and loosen up a bit. When the colleges make an investigation of the course of study and character of instruction in the high school, the high schools take note and begin to strengthen their work. Neither school can exist without the other. For the most part their methods and aims are distinct, but they overlap enough to make the closest sympathy an absolute necessity. This final bond that will give just and proper articulation can only come thru teachers and teaching.

III. THE RELATION OF THE HIGH SCHOOL TO THE COMMUNITY AND TO THE COLLEGE

CHARLES E. CHADSEY, SUPERINTENDENT OF SCHOOLS, DENVER, COLO.

In spite of the remarkable growth in high-school attendance in recent years, or perhaps as a result of it, the high school cannot as yet be said to have established satisfactory relations either with the community or the college. The principles which must govern educators in determining the curriculum to be pursued in the high school must be established more clearly than so far has seemed practicable. Similarly we must determine the methods of presentation of the subject-matter in the various subjects offered. The question as to the amount of information to be imparted and the degree of mastery of the subject to be secured by the pupil has not been answered satisfactorily.

High-school principals are, in the vast majority of cases, handicapped in the preparation of their courses of study by the limitations imposed upon them by colleges and universities.

To say that these requirements have been fixed very definitely by committees upon which there were representatives of high schools, as well as colleges, is not to the point. The work of these committees, important and excellent as it has been, has always been based upon the assumption that a certain specific amount of work is to be demanded of the high school and that certain subjects must be pursued for certain fixed periods of time. In the carrying out of this idea the distinctly specified subjects are so numerous and the fixed requirements are so great that but little, and in some cases no, liberty is afforded the principal who wishes to offer other courses of study which he may deem desirable.

Thru the efforts of these committees which have determined college-entrance requirements and the very general insistence upon these requirements by our colleges and universities, a very real uniformity has resulted. To a certain extent this result has been decidedly advantageous. It is undesirable, even in a democracy the individual units of which are as independent as they are in the United States, to have our high schools offering courses based merely upon the individual opinions which the principals may have as to the proper character of secondary education. Many subjects have about equal values in any portion of the United States. The vast amount of discussion which resulted from the original proceedings of the Committee of

Ten, and the continual consideration of the proper requirements for admission to the freshman class of our colleges and universities, have been invaluable to secondary education. We needed most emphatically the very kind of work which resulted from the effort toward standardization of high-school courses.

Preceding this long-drawn-out and carefully considered discussion of the high-school problem, ideals in too many cases were exceedingly low. The frequent attempt to complete a subject with only a few weeks study resulted in an amount of superficiality which was highly discreditable to our American education. The appointment in many states of high-school inspectors, whose duty it has been to pass upon the character of the work offered in the high schools, and to place or to refuse to place these high schools upon the accredited list of the university, in accordance with the result of this inspection, has also raised most decidedly the standards of high-school work.

For all these things, those who have the interests of secondary education at heart should be profoundly thankful. It does not follow, however, that there has resulted from this a condition in any sense to be considered as static. We have attained high standards. We now have a vast army of high-school teachers and principals well equipped, who realize clearly what is implied by first-class work. They know definitely the kind of scholarship necessary for pupils who expect to pursue work in colleges and technical schools, and in general they may be said to be, in a very real sense, masters of their problem.

In spite of these good results, however, these high-school principals and teachers under present conditions are not able to give to all their pupils the most valuable work. It is now a commonplace that different pupils frequently require somewhat different work. The intellectual power of the pupil, the kind of life for which he is probably destined, his home conditions and the local interests of the community, all modify more or less any ideal course framed by any committee of high-school or college people, no matter how carefully their work may be done.

The old idea that the college-preparatory course, of necessity, is the course of most value to the pupil who will not go to college, is false. There are many subjects which are of more value to the pupil whose education ceases with the high school, than some of the courses accepted at the present time for admission to college. If the number of specified subjects for admission to college were substantially decreased it would certainly be easy for this adjustment to be made in individual cases, and should hinder in no way the possibility of the pupil receiving the proper credit for his work should his plans change and make possible a higher education which was not anticipated.

As it is, however, if the high-school principal or the teacher adviser recommend certain subjects not on the accepted list, the pupil's chances for successful admission are decidedly lessened. The result is that in practically all cases these more valuable subjects are omitted and the time which should have been given to them is spent upon subjects of minor importance. The common-sense

of the pupil frequently comes to the front, and realizing that much of his work is not worth while to him, he leaves school.

While I am not one of those who believe that every child should go thru high school, and that a tragedy has resulted when the child becomes discouraged and leaves the school, yet I do believe that there are many cases where very real harm to the individual has come thru his failure to find in the high school the work which he wishes.

A commonly suggested relief to this condition is the establishment of parallel courses more practical, sometimes vocational, in their nature, which are not intended to prepare for college. There are serious objections to these courses under present conditions. In the first place, courses which do not prepare for college are looked upon as distinctly inferior both by the teachers themselves and by the pupils, with the result that registration in these courses is discouraged and their real value underestimated. In the second place, under present conditions the injury already alluded to frequently occurs: the pupil who at first has no desire or ambition for higher work finds his power and ambition developing, only to be confronted with the fact that so far as college entrance is concerned he has been marking time for two or three years. Needless to say the realization of this wasted effort is discouraging and generally decisive in preventing the extension of his educational equipment.

The high school emphatically needs more freedom than it has at the present time. While all high-school educators are not agreed upon the kind of work which should be found in high schools, a large number most strongly emphasize the fact that, if allowed more opportunity, they themselves could make their high schools more effective in meeting the needs of the community.

We hear a great deal of discussion nowadays about the superficiality of the elementary-school product. Many times we feel inclined to admit a measure of truth in this criticism. We believe that in many cases mastery of certain elementary subjects has not been obtained and cannot be secured in the elementary schools. Certain phases of grammar and arithmetic are unquestionably too difficult for proper presentation on the part of the teacher and mastery on the part of the pupil in the elementary schools. Many educators believe that the more difficult portions of these subjects are of far more importance than some things found in the high schools. The heavy demands of the college and university make it impossible to offer these subjects. Admitting for the moment the truth of such a belief, would it not be better for our high schools, if it were possible, to have these subjects offered as part of the general required work in the high school? I believe that it will not be long before it will be recognized as desirable that sufficient flexibility in college-entrance requirements should be secured to enable the high-school principal to frame courses of study which, in his judgment, are best adapted to the needs of the pupils under his charge, with the assurance that if they are well organized the pupils desiring higher education will experience no difficulty in securing admission to the college or the university.

The argument that courses of study which are not framed in compliance with the entrance requirements of our standard colleges are elected with a full and free understanding on the part of the pupil, and that he must therefore bear the consequences of his folly, is specious. American life always has been and will continue to be far more flexible than life in other countries. It is highly desirable for it to be so. If a pupil has been pursuing well-organized courses of study faithfully, he has experienced a mental growth which will not prove discreditable to him should his chances for higher education be secured.

The old assumption that the particular courses for which credit in our universities is given are inherently more valuable than others is incorrect. This will from year to year become more patent to all. Modern life with its ramifications has developed lines of thought and study which, while different from the traditional courses, do possess genuine culture value and develop genuine power.

It must be assumed that the well-organized modern high school has a faculty eminently able to determine what courses should be accepted toward graduation. This faculty, if less hampered, will be able to develop courses better fitted for local needs than those traditionally demanded.

The period during which it was advisable to demand certain fixed amounts of work in certain definitely specified studies has, for our better-equipped high schools, passed by. We have entered upon that stage in our secondary development when the efforts of our colleges, so far as they continue to endeavor to supervise high-school work, should be confined to the securing of a genuinely high standard of work in the course of study offered. Our high-school principals must develop such an individual sense of responsibility that their mere general statements that their students have completed definite courses of study covering certain amounts of time should be sufficient to secure their admission without further qualifications.

I believe fully in high standards of work; I believe that our universities have much to learn yet in the way of demanding from the beginning to the end of the college course genuinely scholarly work on the part of the students. I believe that if the high-school graduate is not able to measure up to these standards in the colleges, his usefulness as a college student is at an end and he should be so informed. I do believe, however, profoundly, that every student should have his chance and that we have now reached the time when this greater flexibility can be secured, and that if it is secured, the general results for education will be distinctly good.

In spite of the ease with which educators are brought to agree to these general truths, it still remains difficult to bring about any real change in conditions. The problem of securing greater flexibility, and yet not endangering the good secured thru the combined efforts of the faculties of our high schools and colleges during the last fifteen years, remains a difficult one.

Perhaps some suggestion may come from a consideration of resolutions

recently adopted by a conference held by representatives of forty-eight Colorado high schools. After an unusually careful discussion participated in both by representatives of the State University and high-school instructors, it was resolved:

That each high school should be at liberty to arrange the content of four to six units of its course to the end of best subserving local needs and that the university should accept for entrance such units of this work as have been well organized and well taught even tho the subject-matter is not traditional.

Altho this resolution recognizes the existence of the "unit system" as the prevailing system used in high schools, it was felt that the system itself was unsatisfactory. The very word "unit" presupposes a mechanization of the course of study which is bound to interfere with the best interests of the high school and of the student. It was therefore also resolved:

WHEREAS, The various studies of the high-school curriculum differ in respect to the purpose for which they are taught and to their functions, and

WHEREAS, The usual practice in high schools now is to teach all subjects without any differentiation in method with respect to function and purpose, therefore, be it

Resolved, That it is the sense of this body that such a differentiation in method should be made; that certain studies should be taught intensively to the end of producing definite powers and abilities; and that content subjects should not be taught with the methods suitable to formal subjects, but should be taught to the end of inspiration, producing equivalent results with a smaller expenditure of time and energy; and that this may be done, be it further

Resolved, That it is the sense of this body that the present unit system, with its insistence upon mathematical measurement of inspirational result, and its tendency toward mechanization of method, is unsatisfactory, and that some modification is desirable.

It is probable that at the present time it would be unwise for high schools forcibly to break away from the requirements imposed by our universities. Continued agitation of the subject is necessary. There must be a very keen realization on the part of the university authorities that the present system of entrance requirements does not result in the furtherance of the best interests of the high schools.

On the other hand, as public school educators, we must never lose sight of our great aim in high-school work: the realization of a condition which will best meet the needs of the community.

IV. *PROPOSED CHANGES IN THE ACCREDITING OF HIGH SCHOOLS*

C. P. CARY, STATE SUPERINTENDENT, MADISON, WIS.

There are valid objections to every conceivable method of admission to college. The oldest method of which we need to take any notice is that of examination of every prospective student at or near the time of entrance. This method, however, resulted in a cramming process rather than an educational process. Students commonly gave only the tithe demanded by the law; mental assimilation was not called for. The secondary school shaped

its work to a highly specialized end—that of passing a more or less stereotyped set of entrance examination questions. It was the era of conning of question books composed of examination questions that had been used in Harvard, Yale, and other institutions of the east. The intellectual and spiritual growth of the pupil suffered arrested development from which he might or might not recover in the period of four years in college. When the human mind once begins to grow by accretion instead of assimilation it takes a set that is likely to remain thru life. The pedant and the man afflicted with that peculiar mental squint called “total recall” were the legitimate outcome. Examination for entrance to college means dry rot in the secondary school. The examination board removes some administrative difficulties but it has not, in the nature of the case, reached the root of the difficulty. We still have the examination with its attendant evils. I am told that the Harvard authorities, at least some of them, still claim that the entrance examination gives them a better class of students than any other plan they have tried. I have also been told recently by a gentleman who is familiar with the Massachusetts situation, that nobody outside of Harvard concurs in this opinion.

The certificate plan has been used in the east and is still used in large measure by many of the better institutions. Reports conflict as to the efficiency of this plan, but as the board now charged with the administration of the certificate plan pursues a very conservative course in accrediting only such schools as have proved their efficiency, and since the list is revised yearly and any school whose pupils do not reach a high standard is thrown off the list, it follows that principals will use the greatest care in recommending only students of more than ordinary ability. While the certificate plan may be efficient in the sense of bringing into the schools a limited number of high-grade students it, nevertheless, has a tendency to shut out the average student from college privileges.

This, by the way, is one of the greatest difficulties today in our higher educational institutions. The schools seem to want only the intellectual cream of the country. This tendency is away from the democracy of intellect, and it is unfortunate, for the reason that at present our schools pay a premium on power to absorb and give out again the instruction received. The student who is slow in maturing or who is so original in his bent of mind that he finds it difficult to conform to the order of things that he finds around him in the schoolroom, has an uphill road to travel in getting thru the secondary school, and especially in getting into college. The aristocracy of intellect is the bane of many a higher institution of learning. This would not be so bad if the precocious student always proved to be the best in the end and the most helpful to his fellow-men; but it often happens that he falls by the wayside in later life, while the student who did not make his mark in college becomes the benefactor of his race. Those of us who have read Swift's *Mind in the Making* will recall his chapter bearing upon the unpromising character of the youth of many men who are now world-famous.

The diploma plan of admission to the university originated, I believe, in the University of Michigan. It has come to be the chief method of admission to all the state universities in the group of North Central states. In the early years of Michigan's history, laws were passed making the state university the head of the educational system, not merely the highest school in the system; it was to exercise supervisory authority over high schools and over other colleges that should later be established. This gave authority, and, in fact, made necessary the then liberal plan of accrediting certain schools so that graduates might enter the university on diploma.

No other state in this group, so far as I am aware, had such a provision in its early legal enactments. In Wisconsin, for example, provision was made for the supervision of high schools by the state department of education, and not by the university. The state superintendent was required to approve all free high-school courses, to inspect high schools, and to withhold high-school aid from such schools as did not reach a reasonable standard. The only authority given the university was bestowed upon the Board of Regents which was authorized to determine entrance qualifications.

Following the lead of Michigan, Wisconsin and various other states of the Union have developed a system of inspecting and accrediting high schools. Many difficulties grew out of this relationship between the high schools and the universities. Numerous efforts have been made to solve these difficulties without giving up the general plan. For instance, when it was discovered that there was a strong call for courses of instruction that did not, according to the traditional idea, lead to college, the universities suggested that the schools might offer courses that did not lead to college but which were designed more immediately to prepare for life and for service in the community. This solves the difficulty in part only, for it involves an early determination on the part of the student whether he will go to college at the end of his high-school course or give up his school education at that point. This is indeed a serious difficulty. No pupil is fully prepared to say, at the beginning of his high-school course, whether he will be able to enter college or not, or whether he will desire to go further with his education. It is evident that the broader the road leading to the college door, the better for the boys and girls of the nation—hence the better for the nation. The question of entering college or not entering college should not be settled definitely, at least not definitely in the negative, until the opening of the college year following high-school graduation. No, it should not even then be settled in the negative, for many a man goes to college after a decade or more of work following his graduation from the secondary school.

Another attempted solution on the part of the university authorities was to say that what was best in the way of preparation for college entrance was also best as a preparation for life. This is a broad and sweeping generalization which no doubt has given great comfort to college authorities; but who is prepared to say that four years of Latin is a better preparation for life than four years of well-planned, well-articulated work in industrial training? The

fact is, this generalization is entirely too broad and sweeping and too little based upon actual investigations and facts to be worth anything as an educational doctrine. The fact is, few if any of us believe there is any truth in it. There is a tendency today, and with a great deal more practical sense, it seems to me, to turn the maxim around and say that which is best for life is best as a preparation for college. I would rather undertake to maintain this proposition than the one so long maintained by college presidents.

Another method of solution has been gradually to liberalize the work of the high school by admitting subject after subject for college credit and of reducing the friction in the high school in analogous ways. This tendency has had beneficial effects, it is true, for the simple reason that it approaches more and more nearly to the condition that ought to exist as between college and high school.

Another method that has been used in a few states is the establishment of a board composed of the president of the university, the state superintendent and certain others for the purpose of determining what the high schools shall teach and how they shall teach it. The state of Minnesota has perhaps had the most successful experience of any state with a board of this kind, but I am informed that it amounts to very little more than a device after all for the university to exercise its real authority over the schools thru its president, without creating so much friction as utter lack of representation on the part of the high schools would involve. I am told by competent observers in Minnesota that the university really dominates the situation in that state, whatever appearances may be.

In Wisconsin we have a double-headed system of inspection and some other states are now moving in the direction of such a system. This tendency is unfortunate. The state inspects and the university inspects, but when the two occupy the field jointly, the university inspection is in the position of paralleling, duplicating, and conflicting with the work of the state, or vice versa, if it better suits the hearer to put it in that form.

This is not a final solution to this vexed question. I have had many letters from high-school inspectors, from high-school principals and others, most of which show confusion of thought upon this point. Some think the state can inspect in one way while the university inspects in another; that one may inspect for one purpose and the other for another purpose, but this is only temporizing the situation. In order that we may have unity, efficiency, and economy in the inspection of high schools the inspection should be centralized.

The evil effects of the system of accredited high schools are numerous and serious. The college or university is today yielding slowly and perforce to the pressure of modern life without its walls. The old ideal, and the ideal still in vogue in the college of letters and science in particular, is that of leisure to follow intellectual interests to the end that scholarship may result. To make a college course useful in the way of preparing for efficient citizenship, except in the broadest and most general way, is not the ideal of the college or univer-

sity today. This tendency and ideal, the higher institution of learning forces down into the secondary school. Such an arrangement forces all to take college-preparatory courses or forego college, as has already been stated. It brings utility courses into disrepute and disarranges the natural valuation that would otherwise be placed upon the various studies of the high school. Furthermore, the university tends to crowd too much into the course. The requirement, for instance, in the four-year Latin course is much beyond what the ordinary student can accomplish satisfactorily. Thus, while the university stands for scholarship it, in the direction of Latin and many other subjects, stands squarely in the road leading to the ideal of thoroness. This domination by the university has existed so long and the high schools have become so accustomed to it that they generally seem as little aware of it as we are of the air we breathe. It has become the natural way of living. The work imposed upon the high schools by the university is also, in many cases, too technical for the needs and interests of boys and girls in our secondary schools. This is notably the case in physics, but it is not confined to this subject.

The accrediting system places the control of the high school outside of the high school and in another authority which tends strongly to *use* the school to its own ends. This tends to make a technical school of the high school. It often does not have the merit of being technical in a broad sense. It becomes more of the nature of a trade school. The high school apes the college in many ways and does not develop into a strong, independent, self-reliant institution with its own ideals and standards. The high school looks to the college to learn its duty to its constituency instead of studying the situation at first hand.

What is the remedy? At the outset I reminded you that no method is free from objection, but the plan to have the high school free from all domination except what the state sees fit to exert thru legislation and thru its department of education is the one that commends itself to me as far preferable to any other. This is particularly true of all state universities. There is not the shadow of an excuse for the domination of high schools by the university in any state in which the high schools have been brought up to a fair standard of excellence and in which the state has come to realize the necessity of making a school system out of the schools of the state.

The state university is often spoken of as the head of the school system. Whether it is or not depends upon the meaning of the term. If it is used in the sense of the highest school in the system, then it is true, but not in any other case. The state university should rest squarely upon the preparation given by the school next lower in the system. The head should not separate itself arbitrarily from the body.

When colleges were small and had a limited faculty and taught only a few branches, it was necessary for the proper articulation of the secondary school with the college to have pretty definite instruction as preparation for passing from one school to the other; but at the present time our great state institu-

tions have beginning classes in almost every subject ordinarily pursued in the high school.

It makes no material difference to the university whether the student has pursued physics or not; whether he has pursued German or not; whether he has pursued biology or not. The only thing the university by right is concerned about is the thoroness with which the work that is attempted is accomplished, and the habits and maturity of mind acquired.

I would, then, have the states of this group develop state departments with an adequate force of inspection entirely independent of the university, stimulating and encouraging high schools, and bring about such development in them as modern needs and requirements dictate. I do not believe that the state department should dominate the high schools in the sense of standardizing the course of study and determining, from outside, just what the high school shall do and what it shall not do. The only graduates of four-year high schools that should not be recommended for college are those who have not shown intellectual interests or who have pursued what may properly be termed trade-school courses.

Such a change as I suggest would in no wise lower university standards; in fact, I think the greater thoroness in the teaching of the branches that are attempted, which would likely result, would bring about a far better standard of work in the university itself.

The college thru official, or pseudo-official, inspection is now making it impossible for the high schools to do work that satisfies them, or the public, or the college. Many students who ought to go to high school do not go, and many who start do not finish because the courses are not adapted to boy nature unless the boy happens to be a bookworm.

What we ask for is that the university shall release its grip and allow the secondary schools to develop. They ought to be permitted to develop freely from within and not be forced into the Chinese shoe of college-entrance requirements. When this is done both institutions will profit by the change.

V. *SOME PERSONAL RELATIONS OF COLLEGE AND UNIVERSITY IN THIS DEMOCRACY*

WILLIAM ESTABROOK CHANCELLOR, SUPERINTENDENT OF SCHOOLS,
NORWALK, CONN.

For nearly a thousand years, the university has stood in the midst of western civilization as the chartered City of Freedom. In its essential nature, the university is detached, isolated, and independent. Its quality of detachment, its character of independence, enable the university to perform its own peculiar service. Whatever be their name or their reputation, that body of scholars which harkens obediently to the voices of the changing social world cannot constitute a university, or even an institution; it becomes merely an

instrument. The franchise of the university teacher is to speak the truth clearly and in full.

As a matter of history, the college is one of the essential component members of the university. The college is not a university in the making; nor is a university an overgrown college; nor again, is the college properly a university preparatory school. For any school to be merely preparatory to another is for it to develop its students to less than the full measure of their possibilities and of its own opportunities, which from every point of view appears unfortunate.

As part and parcel of the university, the college shares with it the historic quality of detachment and, in a certain sense, of isolation. The peril of any quality is, of course, that it may develop to the extreme of its logical defect, which in this instance is remoteness, with attendant inconsequentness and absence of sympathy.

The college is far older than such democracy, as we mean when we use the term in these modern days. But the high school is the product of that democracy—a typical and characteristic product. Since we are only at the beginnings of democracy and do not yet see clearly what it means, it is hazardous to try to state its principles. There seems, however, now a measure of agreement that democracy involves a harmony, plainly difficult to secure, between at least two principles. Democracy is the control of society by the majority—perhaps I should say the effective majority. Not so obviously, and yet many believe truly, democracy is the direction of society by the men who understand its needs and its interests. Neither the effective majority that controls, nor the abler men who direct, society necessarily proceed upon the lines of the general welfare. Yet in building the high-school, democracy has unmistakably proposed to benefit humankind. Arising new in the life of society and wholly dependent upon it, the high school has found itself confronting the ancient and independent institution of the university. But it sees that institution itself strangely unquiet and often unhappily incomplete in form and insecure in mood. In this presence I need only to suggest the great variety of universities in our own land. The high school, strange as this may seem in the light of history, has standard qualities of maintenance and operation. The contrast is suggestive.

It is, therefore, highly interesting to observe the struggle of adjustment between these schools which in the progress of youth stand in consecutive hierarchical relation. The high school stands for the education of youth, to make individual lives worth while to themselves, and thereby to society. The university, which, I repeat, is the college plus the professional and technical schools, has stood for the preservation and extension of science and art. These are by no means antagonistic forces; and yet they are not forces in the same forward line of direction.

Until the boy or girl is eighteen or nineteen years of age, knowledge is but a means to be used for his benefit. Thereafter, he becomes a means by which knowledge may endure in the life of the race. For the high-school graduate,

the world of culture thru teachers and books has paid its price. He is thereafter a bondservant whose life is not his own. This democracy is the agency of a regeneration. It produces a self-alienation in which the person comes into being.

Here then is the word that suggests the strength and weakness of the present situation as it exists between school and college. It is with much hesitation and caution that I proceed to the theme proper: the personal relations between the free and immeasurably useful college and the democratic high school.

There are three ways in which young men and women go from high school to college:

They proceed from school to college via examinations imposed by the college.

They proceed via certification upon subjects determined by the college but with proficiency estimated by the school.

And they proceed via solicitation in the school from the college.

Whether in the college or in the school, two forces make war over youth: the traditions of the ages and the ideas of the present. If we must use catch words, let us call them "culture" and "efficiency." The same forces make war over school and college themselves. Shall these institutions pursue the old aims, or shall they cease their aloofness and share the common life and the common lot? The answer in fact to all the questions depends largely upon the person. We do not operate with figures but with human beings, weighing so many pounds each, more or less, and coming to us unsuspectingly out of the matrix of society.

There were in 1907 about 800,000 boys and girls in secondary schools, and about 125,000 young men and women in higher institutions. A secondary school is a school that educates youth for four years—from the ages of fourteen to eighteen, more or less. A higher institution is one that imparts knowledge to and trains young men and women for perhaps four years, perhaps seven or eight years, from the ages of (say) eighteen or nineteen years to forty years, more or less.

Said Elihu Root in an address before the New York State Legislature, thanking them for his election as senator of the United States: "The general situation is that we now have a civilization so complex that none can understand it, and that we are producing scarcely enough men to operate it properly." Let me use just one illustration: Three months ago, the Senate of the United States asked the Interstate Commerce Commission to inform it whether or not the railroads of the country were generally raising rates. Last week the Commission replied that it could not find out the facts; that twenty clerks had been detailed to examine the matter, but that in view of the publication of an average of three million pages of new rates every week, it had proven impossible to answer the question with statistical accuracy! The flood of life is ever growing greater, ever flowing faster.

No man knows the United States or its people. We do not know whether there are five or ten million persons here properly styled negroes. We do not know whether the annual average income of the American people is twenty billions of dollars in value a year or a hundred billions. We do not know how many persons there are who may properly be styled Christians.

Said Theodore Roosevelt recently in an address before a convention of ministers: "We must find a way to get more able men into the Christian ministry." The same thing is being said daily by competent observers regarding education, journalism, and nearly every other profession and learned calling. This is said not with reference to the power of economic absorption but to the social needs. Civilization is running short of men who know and can do. The mass of people may soon exceed the directing power of its leading persons. Several times before in human history such a state of affairs has developed, with results that require no exposition here. The service of persons is too often ignored.

A principle is simply the thought of some person commonly accepted by others.

A statute of government is simply the common thought of persons in effective control.

An article of creed is likewise.

A law of nature, whether it be gravitation or light or electricity, is but the thought of God.

Persons always rule.

And the failure of high school and college to send into American life the number and the kind of men and of women actually required today is the failure of the persons who direct and operate the high school and the college.

I bring in no bill of particulars here. I am not the prosecuting attorney in this matter, but one of the defendants. When less than one in six of the youth who enter the secondary schools proceed to college, we have a situation not permitting defense, but requiring remedy.

Between democracy and Christianity there are many likenesses and yet many differences. Democracy says, "Let me have always one majority, whether it be five hundred and one in one thousand or three in five." Christianity says, "Let me have all; and if so be but one stray in one hundred, I will leave the ninety-and-nine and go into the wilderness to seek and to save the lost." Christianity has taken hold of elementary education to make it universal; democracy is taking hold of secondary education to make it common; but higher education is not yet fully persuaded of Christianity or even of democracy.

Ah, I hear it protested that of course not everyone is capable of higher education; in fact, only a few are—the intellectual élite, that is, ourselves. Now I am not here to argue either generalities or impossibilities, or even ideals. I do not say that we might easily double the number of youth going from high school to college. I will not say that we might, by better methods, increase

by so much as one the number who will go to college in 1910. What I have to say relates to obvious fact. Time was in America when culture sought to make sweetness and light prevail; when the ministers of churches, the writers of books and essays, the professors of colleges, the teachers of academies went about proclaiming that a college education was good, was indeed immensely desirable, and that humanity needed scholars as social engineers, and when one by one they took youth by the hand and set about persuading them to go to college.

Some very old-fashioned ministers and teachers do this yet. Some very new-fashioned universities in new ways are doing the equivalent now. To all of whom, praise and gratitude! High-school teachers should visit colleges and college teachers should visit high schools.

To what shall I liken education? I would liken education to a voyage: A great ship rides in dock near a flat shore covered with small, low houses, and troops of little people go on board. The ship swings away from the wharf and makes out for the open sea. Captain, mates, and most of the crew know the course and the haven; but the passengers never crossed before. It is a long, long voyage thru storm and calm, thru cold and heat; a voyage of years; a voyage that tests faith. The years pass and the little people grow and grow. During the voyage, most of the passengers go overboard into the open sea; but some make the voyage to arrive at a coast with mountains and valleys, cities and castles, a world of powers and of activities unseen by the dwellers upon the low coast on the other side of the sea of life.

Such is education. And the question is how to keep the passengers aboard until the ship makes harbor.

It is a mere figure of speech and will not stand too close inspection; but I hope that it serves the purpose.

There is a scene that we who deal intimately with the lives and destinies of others may recall with profit: All night Jacob wrestled with the man, and in the morning the man broke his thigh bone and subdued Jacob and thereby saved him. Youth are not saved until they are laid low by men and brought to understand the higher powers. There is in every human being a savage, an *original*, a primitive, who by defeat and by surrender gains in a new worship his citizenship in a kingdom that is worth while.

Every relationship of high school and college, of college and life, of school and life, of any and all kinds of educational institutions with one another and with the world, to count for anything beyond the printed page or the articulate sound, must be immediate and personal. For its expression, it must have the forth-stepping and forth-putting man or woman.

The feast of knowledge is set. The host must send forth into the highways and among the hedges and compel the wayfarers to come in as guests. For knowledge is indeed a weariness to the flesh, an aching in the bones, a leaven of melancholy, save when it is being shared by the hungry at one's own table.

Rules and regulations there must be, commissions and boards are yet

better; but the men and women who go about with their invitations and with their prayers and with their compelling are best.

I am not advocating the letting-down of the bars; I am only saying that we do well to persuade our youth that it is worth while to go into hard training in order to develop strength and skill and courage to jump them fairly.

TOPIC: THE PROBLEM OF THE DELINQUENT PUPIL

I. TRUANCY: A FEW CAUSES AND A FEW CURES

BERT HALL, CHIEF TRUANT OFFICER, CITY SCHOOLS, MILWAUKEE, WIS.

Truancy in its broadest meaning is not confined to school children. This country has a large population of adult truants—men who “leg” from their duty; women who shirk and have but the faintest conception of, and no training for, life’s most sacred duties.

Children coming from homes presided over by truant adults cannot be expected to be without truant tendencies. The burden in these cases rests upon the school management and other agencies to correct such tendencies with the best methods that have been or may be devised.

Truancy in children is delinquency and delinquency is in thousands of cases incipient crime. This question of truancy, therefore, is of more vital importance to the American people than the so-called great political questions of our time.

The juvenile-court movement, started about ten years ago, has attracted the attention and won the approval of the nation. The greatest work of these courts has not been in the correction of juvenile delinquencies so much as in pointing out the causes which produce the appalling amount of delinquency among our city school children.

From our present view-point, the old methods of treating child offenders against the law appear barbarous and cruel. Some of our present methods seem to some workers very short-sighted and foolish. In states where there are adequate school-attendance laws, and the enactment of such laws is the first step in solving the truancy problem, it seems foolish to wait until a child has committed a felony before the authorities take steps to correct and shape aright his life. Why wait and turn the child over to a juvenile court for correction when a study of the home life of the child by the school department—a truancy department, if you will—might have corrected or prevented the whole trouble?

The ideal truancy department is one that not only compels attendance at school but one which can enlist the co-operation of teachers and laymen in the work of preventing all kinds of juvenile delinquency. There is nothing accomplished in the best juvenile court in America that could not be done and done better and at less expense, without the machinery of a court, thru a well-organized truancy department. The court frequently does not reach

the child until he has formed habits that are hard to correct. A truancy department should, if properly organized, reach the child before his evil tendencies have crystallized into habit.

In connection with this ideal truancy department there should be organized a friendly Visitors' Association, similar in its work and scope to the Juvenile Court Committee of the city of Chicago. Such an organization would be powerful in looking up home conditions; providing for changes of environment when necessary; assisting, when poverty is the cause; bringing to justice those who contribute by word or act to the delinquency of children; and giving counsel to the vast army of incompetent mothers and careless fathers in the homes from which come 80 per cent. of the truancy cases in our cities.

The modern city is a very new development in the history of the human race. So rapid has been the growth of cities in America, that we have not learned to adapt our lives to the new conditions. As a nation we have been money-mad, the great flow of humanity toward the centers of population having been caused chiefly by one desire—to get rich. In this national struggle for money we entirely forgot the needs of childhood and have allowed conditions to develop in every city in the land for which we are now paying a fearful penalty.

We forgot that children must play and so forgot to provide playgrounds; even the schoolmen who should have interested themselves in the matter failed to act sanely and so we find most of our city schoolhouses erected on grounds so small that no place to play can be provided without paying a large price for the needed space. We have been prone to look upon education as something that could be entirely acquired by the study of books. The character-building influences of the playground have been overlooked.

And while I am speaking of character-building influences, I will quote from a paper read a few years ago by Thomas Chew, of Massachusetts, an experienced worker with boys, before the "International Workers with Boys":

National history affords many illustrations of what I mean by the influence of environment. The female birds are often the color of the leaves of the trees in which they nest. Many insects are the color of the plants on which they feed. We know that nature's endowment of these qualities was for the protection and preservation of these birds and insects. Boys take on the color of their environment for the same reason. The boy living under bad moral and physical conditions lacks the incentive to be good. The right examples are not there. What's the use? Who cares? Why should he make himself a target for the ridicule of his companions—become a "sissy boy"? If a clean face or a clean collar makes him conspicuous, add a little dirt and all is well. If morally clean, swear a little, smoke a little, and the job is done. He is then fit for membership in the gang. He has conformed to his surroundings just as your boy or my boy would have done.

The rooms of these tenement districts are small, the buildings are crowded together and there is no place for the children to play but the street or the alley where they at once become violators of some law or ordinance. If you add to this description a dismal, dirty railroad station, a freight yard, a few coal docks, and then people the district with the unfortunate poor, a large percentage of intemperate people, and a sprinkling of immigrants from southeastern Europe, you get some idea of hundreds of districts where character of the wrong kind is made.

All sociological workers agree that it is environment that makes boys bad. Then why punish the boy? What we should do is to strive to correct the environment.

Environments which make for the development of bad character should not have been allowed to become a fact in our cities. That they are here is our misfortune. That they remain is our disgrace.

If such conditions are to be remedied, help must come from outside. I know of no agency so capable or so well equipped as the schools. The school touches the daily life of the unfortunate children of these districts. It should reach and influence also the parents and the homes of these districts.

Before any steps can be taken to correct some of the causes which I have mentioned, the school department must be provided with adequate legal tools with which to work. For reaching the negligent parent, Wisconsin has one of the best laws enacted by any state. It provides that any person having under his control any child between the ages of seven and fourteen years shall cause such child to be enrolled in and attend regularly some public, parochial, or private school during the hours and period when the school in which the child is enrolled is in session. Children between fourteen and sixteen years must also attend school in the same manner unless the child is regularly employed at home or elsewhere. The penalty is a fine of from \$5 to \$50, or imprisonment until such fine is paid.

More than 80 per cent. of truancy is the result of indifferent or negligent parenthood. There are many parents who make no effort to keep their children in school regularly. In the past they relied on a truant officer to get the child in school and keep him there.

Under our present law, as administered in the city of Milwaukee, all that has been changed, and negligent parents are being taught that they have some responsibility in the matter of the school attendance of their children.

In case of an unexcused absence parents are notified, on a blank provided by the truancy department, to call at the schoolhouse and explain. The main provisions of the law and the penalty are printed on these notices. In more than 75 per cent. of cases this notice is sufficient and no further trouble is experienced with the children of that family.

If no satisfactory explanation is made, or if the school principal suspects deceit, the chief truant officer is notified. On receipt of this notice the parents are at once ordered to call at the truancy department and explain. Accompanying this order is a brief copy of the law printed in four languages—English, German, Italian, and Polish. This order usually brings a prompt response.

After talking with the parents and learning something of the causes of the child's absence, a course of action fitting the case is taken. When indifference, or intemperance, or careless neglect is the cause, parents are warned that they will be arrested and brought into court if further trancies occur.

Many fathers and mothers who had not the time or the inclination to look after the attendance of their children found it a very easy matter to keep their

children in school after having been brought to court and warned that a continuation of their indifference would result in the maximum fine of \$50 being imposed.

There are many cases that are not so easily settled. The widowed or deserted mother of a family who is forced to work away from home to provide for her flock is often compelled to keep one child of school age at home to care for the house and the younger children.

In times of depression the head of a large family may be thrown out of employment and cannot purchase proper clothing for his children.

The father of ten or twelve children finds difficulty in providing nourishing food, sound clothing, and a decent house for his flock on an income of \$10 or \$12 per week, and is forced to keep a child of school age at home while the mother goes washing or scrubbing to piece out the family income.

In these cases the aid of a Child Protective League or a Friendly Visitors' Association would be of great value to the truancy department. Such a society could, as one remedy, provide the mother with work which she could do at home. In localities where the number of "little mothers" is large, a day nursery could be organized. In such localities I urge the establishment of day nurseries in the school building. Here the small children of a family could be brought by the little mother and cared for under the same roof with herself. The day nursery could be used as a training school for nursemaids. Girls who have reached the age of fourteen years, and who must go to work, could take a short period of training in this room in the care of children and thus fit themselves to perform the duties of nursemaid in a competent manner. A training of this kind would be of immediate benefit in providing wholesome employment for these girls and a permanent benefit in keeping many from taking up factory or sweat-shop work—lines of employment that totally unfit girls for domestic work and people our cities with the vast army of incompetent mothers.

In some cases there are physical defects in the child that need the attention of a physician or surgeon but the parents cannot afford to pay for such services. A medical department in the public-school system would be of great benefit. Where a medical staff is not maintained, help may be secured from a children's free hospital, a visiting nurse's association, or from many practicing physicians who, as in my own city, are always most kind and helpful when called upon to assist the truancy department.

If investigation shows that parents are unable to control their children and keep them in school and if a warning is not heeded, the child is given a report card which he must bring to the truancy office once each week showing his attendance and deportment. This report system has proven very successful in this class of cases. I have had boys, who fully realized the power of the gang over them, come to me voluntarily and ask for a report card that they might have a defense against the arguments of their companions who urged them to "skip." These companions are usually boys over fourteen who have

permits to work but are temporarily out of employment and for whom it is difficult to provide. The return to school of such boys will frequently disrupt or disturb a whole class, the boy having become entirely weaned from the school atmosphere. To care for such boys the truancy department has constituted itself a boys' labor bureau to secure employment for such boys as cannot find it for themselves.

Our law compels children between fourteen and sixteen to attend school unless regularly employed. We therefore have all children who quit school at fourteen reported to the truancy office. A list of these children is forwarded to the factory inspector who checks off the names of those who receive permits to work and returns the list to the truancy office. All children whose names are returned as not having permits are at once returned to school.

This is of great importance in the case of boys. City boys between fourteen and sixteen will develop character of the wrong kind very rapidly if left to wander aimlessly about the streets, becoming in a short time the dangerous young ruffians who fill our reformatories, workhouses, and jails. Most girls who leave at fourteen do so to assist with the housework at home and so are not in so much peril as the boys.

In cases where it seems inadvisable to return boys of this class to school and where employment in the city cannot be secured, places to work on farms are secured. At first thought it would appear that such a scheme would be a failure. City boys who know nothing of country life or farm work are likely to be looked upon with suspicion by the average farmer. My experience last year leads me to believe that thousands of truant and troublesome city boys can be improved, if not cured, of their evil tendencies by this method. Last April I inserted an article in all the weekly newspapers of the state of Wisconsin outlining my plans. The result was 462 applications from farmers for boys. Before August 1 I had placed 208 boys in farm homes that had been investigated and recommended as suitable places for the boys. Farmers not only advanced railroad fare but were willing to pay the boys from \$8 to \$12 per month. Of the boys thus sent out, 150 did well; about 100 returned to the city in September and entered school or secured work; 50 have permanently adopted country life. Of those who returned to school very few have given the department any trouble this year.

These boys were lifted from the most pernicious influences into the wholesomeness of the country, and the majority responded to the change splendidly. This year I hope to get places for fully 500 boys.

It is a most sacred and patriotic duty which the schools owe to our wayward and truant boys. Most of the misery and degradation of the next half-century will be the result of the acts of those who are now such children. Every power, every influence possible should be brought to bear to prevent them from drifting into the so-called reformatories and industrial schools. Employment in a country home far removed from scenes of vice and degradation is preferable to any reform school, no matter how well conducted.

Institutional life is not normal life and so children reared and trained in institutions are not normal. It should be possible for every child in this great Christian land of ours to have the benefits of a home and home training. The reform-school boy rarely develops into a model citizen and the brothels of our great cities are filled with graduates from industrial schools for girls.

The city of Chicago with its parental school can care for only 300 boys. The school is a well-conducted training school and its records show wonderful results. Such schools are useful and no doubt very much improve the boys sent to them. But they would be much more useful if their paroled boys were permanently removed from the old pernicious environment. I do not believe a boy should be sent to a parental or truant school until all other agencies have failed.

I have taken some very bad delinquents from the very threshold of reformatories, sent them to wholesome farm homes, and seen their whole natures change. From their being most intractable, cigarette-smoking, profane, little liars, on the street, I have seen them develop into wholesome, earnest, hard-working boys. If not too thoroly saturated with the vice of the slums, the boy responds to a pure environment as readily as he did to the impure.

I entered the truancy work in Milwaukee believing that a truant or parental school of large dimensions was needed. I have come to believe in a much smaller school and am almost convinced that for nearly all cases of truancy there is a better solution than commitment to a parental or truant school.

II. WHAT SHARE OF THE BLAME FOR THE INCREASE IN THE NUMBER OF TRUANTS AND INCORRIGIBLES BELONGS TO THE SCHOOL?

JULIA RICHMAN, DISTRICT SUPERINTENDENT OF PUBLIC SCHOOLS, NEW YORK CITY, N. Y.

The British premier, Balfour, once said, "There are three kinds of lies: lies, ——— lies, and statistics; and of the three, statistics are the most misleading."

All earnest, honest investigations furnish corroboration of this statement. One usually can make figures prove anything, notwithstanding Sergeant Buzfuz' dictum that "Figures, gentlemen, figures don't lie." One usually can make figures prove anything; but for the preparation of this paper, my attempt to get data from various sections of the United States failed altogether to prove one thing; viz., that there *is* an increase in the number of truants and incorrigibles. These data, however, proved something else: they proved that, until recently, truancy records and statistics were carelessly and feebly gathered everywhere; that they are still carelessly and feebly gathered in many cities, towns, and counties; and that comparatively few cities or counties are properly equipped with a truancy bureau, or even with a sufficient number of truant or attendance officers. The inability to prove that there is or recently

has been an increase in the number of truants and incorrigibles makes it necessary to change the topic to a new form: *What share of the blame for the continued existence of truants and incorrigibles belongs to the school?*

Truancy and incorrigibility are closely interrelated; they are almost interdependable. Occasionally a truant behaves himself when he is in school; occasionally an incorrigible child (by that I mean the chronically troublesome pupil) attends regularly; but, on the whole, the chronic truant is lawless when in school, and the chronic bad boy plays truant when he can. Therefore, altho the writer clearly understands that each of these phases of school life requires special treatment, the limitations of a single paper compel a general treatment of the entire subject. The same limitations compel a neglect of the girls' side of these vexatious problems. The troublesome boy up to the present time has demanded the full attention of all concerned; but waywardness among girls is alarmingly on the increase, due to decreasing chivalry among men, parental negligence, the pleasure-seeking tendencies of the age, and the influence of those who find greater compensation and excitement in a life of sin than in a life of toil. Is it to our credit that little or no scientific treatment of this condition has as yet been undertaken by the school?

Indefinite and unsatisfactory as are most truancy records, where the work has been systematized there is general agreement as to the causes leading to chronic truancy, and as to the general conditions which make the problem.

Most investigators and educators lay the heaviest share of the blame to unfavorable home conditions. Summarized into four groups these conditions appear to be:

1. *Subnormal Physical Conditions*, including mal-nutrition; defective vision, hearing or mentality; organic weaknesses; throat and nose troubles; the cigarette habit; and sexual depravity.

2. *Inefficient Parenthood*, under which class must be enrolled the negligent, the indifferent, the incompetent, the intemperate, and the discouraged mother or father, or both; the deserted wife; the wage-earning mother; and the unsympathetic, often brutal step-mother or step-father.

3. *Degraded Parenthood*, including not only parents who are themselves offenders against the law, but also parents secretly in league with the delinquent child in order to share in the profits of his illegal occupation or even of his criminal acts.

4. *Vicious Associates*, particularly the influence of the young loafer beyond school age.

What share of the blame for these conditions belongs to the school? A boy writing a composition on pins used the following sentence: "Pins have often been known to save people's lives." The teacher challenged the statement by asking "How?" to which the boy replied, "By their not swallowing them." By a similar line of reasoning some share of the blame for these adverse conditions belongs to the school, for its not trying to remove them, in part, at least.

Subnormal physical conditions are at last receiving general recognition from school and health authorities, and no blame for their prevalence now rests upon the school except in those communities where medical aid has not

yet been sought to relieve the situation. Some blame must continue to rest upon the school, as long as badly lighted and poorly ventilated rooms, unhygienic furniture, and poor text are permitted to add to physical defects in children. To what extent the schools must in time provide proper food for underfed and badly nourished children cannot here be discussed.

Inefficient parenthood is one of the heaviest curses resting upon our country. When parents of this class are foreigners or those who for other causes never attended our American schools, no real blame for their inefficiency belongs to us; but might not our evening schools have been made to reach out to help at least some of them? If, however, it were found that an appreciable number of these social failures had been our school children in the past, can we honestly throw the full blame for their shortcomings upon economic conditions, the housing problem, and immigration? Let us go a step farther. Is the school today training the children of the inefficient parents in such a way that when their turn comes they will be less inefficient?

Except in so far as the degraded parent and the vicious associate were at one time school children whom the school failed to help, no direct blame can come to us for their pernicious activity. But some, yes, much blame must ever fall upon the teacher who fails to discover when any one of her pupils is subject to vicious influences; who, having made the discovery, fails to attempt to rescue him therefrom; who, having made the attempt, fails to find out if the influence of the school is sufficient to counteract the evil from outside; and who, when all else has been unsuccessfully tried, fails to invoke some agency outside of the school to remove the child from his surroundings in order to give him a chance to develop in righteousness.

There are reasons other than these which lead to lawlessness in our boys. In such reports as deal with the problem there is a general agreement that truancy is most prevalent during the years from eleven to fourteen inclusive; almost all declare that the third and fourth years of school life show the critical period; and many find among little boys of six or seven years of age a tendency to play truant. Our own experience in New York confirms these general views.

The simplest of these problems is that of the truancy among little boys under eight. One or more of four general causes will account for this phase.

First, Some children acquire the street habit before they are regularly entered into school.

Second, School has been held before the troublesome little fellow at home as a place of terror. "You wait till you go to school. They'll make you mind," is no unusual argument on the part of weak mothers.

Third, School work under some teachers is not sufficiently attractive to appeal to the child who finds more attraction on the streets.

Fourth, Compulsory-education laws rarely require attendance of the child under eight.

What share of the blame for these conditions belongs to the school? Or, better still, what can the school do to remove or lessen these causes?

The first cause can be removed by creating a public demand for more kindergartens and more day nurseries. The community that allows its children under the age of six to find their own occupations in crowded city streets, or in rooms neglected by wage-earning mothers, is sowing the wind which will yield a whirlwind harvest of wayward boys and girls. More nurseries, more kindergartens, and more supervised playgrounds must be our cry, as well as the cry of those outside who are trying to secure these benefits for our little ones.

The second cause can be removed best by personal appeal or at mothers' meetings. Parents must be led to see the folly of using the school as a means of home discipline.

The school must assume the full blame for the unattractiveness of its own work. Teachers must be held responsible for the keeping of children in school. If work which appeals to some children fails to appeal to all, the teacher must note this, and must plan something specially attractive to keep the interest and good will of the little fellow who seems bored. The majority of children get on in spite of the dulness of routine work; but the others, the special or difficult cases, must have special work, or the school must take the blame for its failure to meet their needs.

The varying demands of different compulsory-education laws makes it difficult to generalize in reference to the fourth cause. Whether the best years to be included be eight to fourteen or eight to sixteen, or seven to fourteen or sixteen must be decided elsewhere; but for this point the school must contend that after a child has once been admitted, whether at seven, or six, or even five, attendance on the child's part be made compulsory except when for cause the parent decides to keep him at home. The law in some states defines truancy as a failure to attend school, making no differentiation between the parent's offense in keeping the child at home, and the child's offense in remaining away from school without the parent's knowledge. It is this latter form which the school and the school alone must check. Many a chronic truant of twelve or fourteen acquired the habit as a little fellow. If the school would have fewer chronic truants in the future it must look out now for the unauthorized absences of the little boys, and must see that they are placed under teachers who can make school so attractive that the street will by comparison lose its charm.

Statistics show that the greatest number of cases of truancy and incorrigibility occurs among boys from eleven to and including fourteen years of age and in the third and fourth years of school. The severest indictment of school management appears in this last statement. Why should boys of twelve, thirteen, or fourteen be in the third or even the fourth year of school? Assuming that boys enter the first year of school at the average age of eight (in congested cities the average is much lower) why should they not be out of the fourth year by the time they are twelve, and out of the sixth year at fourteen? We can never again accept as a justification, "Because they do not know enough." The over-age child is the most important problem in the school;

the over-age child is the cause of most of the other serious problems. Some school authorities think they have met this problem when they push the child ahead. Pushing ahead complicates the situation for the boy who does not know the work of the lower grades. It is not a high grade of class he needs, but a class of boys of his own age and his own feeble intellectual powers. Special classes, special schools, picked teachers, abridged and amended and attractive courses of study, including definite, vocational work: these are the means for solving the most vexatious discipline problems in any school. If such measures are not universally applied to the control of truancy, who is to blame?

There are psychological influences, too, that are contributory to the waywardness of the boy between eleven and fourteen. He is neither baby nor little boy, nor yet a big boy. Under inefficient parents, he has lost his fear of home control, and his early fear of school control is disappearing. He feels his strength developing and with its development comes the desire to test it against the strength of another, to match his will against another's. Is not the school to blame that our teachers never seem able to understand that the psychology they studied in order to pass an examination which admitted them to the profession is here needed? Applied psychology means more than a credited course at a university.

Two other important phases of the problem need consideration. What the Germans call *die Wanderlust* is a considerable factor. It is no uncommon thing for a boy to spend hours and days in aimlessly wandering about the streets or parks. Innocent enough at the start, the situation grows complicated before long. He meets other boys, idle wanderers like himself. He meets a bigger boy who boasts of his achievements which challenge the admiration of the little fellow. The worship of the big boy by the little fellow is his unconscious way of expressing the hero-worship, which, if properly directed, is one of God's most inspiring forces. Before long the gang-leader becomes his hero. Hero-worship first, then moral weakness, later brute fear—sometimes caused by physical force, sometimes by immoral sexual control—attach him to the gang and its leader; by this time ordinary school influences have lost their power to reclaim him. A special class or a special school, the best teacher, attractive manual and physical work, and special concessions may help, in many cases even cure. Who is to blame that few school systems have established the right kind of day class or school for these boys? One special school in New York, established three years ago, from an enrolment of over 500 delinquents shows 49 per cent. of absolute cures. Why should these boys, half of whom were cured in this day school, have been sent to a custodial school? Furthermore, is it not better to teach a wayward boy self-control while surrounded by temptation? The weakness of the custodial school is that it removes the boy from temptation and from normal conditions of living. The absence of temptation is no proof that it can be resisted. The willingness to conform to institution regulations is no guaranty of fitness to

cope with trying home conditions. The custodial school, whether truant or parental, should be reserved until after the special school has failed to work reform.

One other phase of the question—to my mind one of the most important and at the same time one of the least recognized—is the improper characterization of the boys' acts.

"He is a bad boy" may mean so many things. In the eyes of some teachers a boy is "bad" if he talks repeatedly to his neighbor. The boy who has a fight with another boy is "bad." The boy who does not study his lessons is "bad." The boy who goes to a moving-picture show is "bad." The boy who throws ink across the room is "bad." The boy who "answers back" is "bad." The boy who rifles the teacher's desk is "bad." The boy who disobeys school rules is "bad." "Give a dog a bad name and hang him" should now read: "Give a boy a bad name and ruin him."

All school types of "badness" need classification. Many of them under careful classification would no longer be considered "bad." A boy's wrong acts are often due not so much to the deliberate choosing of wrong *after* he knows right, but to the lack of any sense of right or wrong. Children's so-called "badness" is due to *unmorality* oftener than to *immorality*. Until a boy's moral nature has been roused and developed, it is absurd to think that one can find the basis of appeal in theoretic ethics or right for right's sake. Who is to blame when blind, unquestioning obedience to short-sighted, arbitrary school rules is made the basis of a child's conduct and reputation?

When children go thru school learning nothing except what can be given to hundreds simultaneously, in classes so large that undue emphasis is laid upon order and quiet, who is to blame if the majority leave school with morals that alarm those interested? Go thru the list of "bad boys" in your school or your town. Classify their offenses. Is immorality or unmorality responsible? If the latter, what share of the blame for this condition belongs to the school? In the process of training, is not the ethical development of a child as much the school's affair as his intellectual advance? If so, why consider a boy hopeless or degenerate because he commits a moral offense? Do we consider him intellectually hopeless or defective because of his errors in spelling or arithmetic?

Let us now leave the many other factors which contribute to juvenile delinquency and give a little thought to the way the truancy problem is being met. A few, but only a few, cities report great advance in the control of truancy. This advance is due in a large degree to the fact that school authorities are paying more attention to the entire problem. Larger appropriations are being secured; more and better qualified attendance or truant officers are being employed; a special superintendent or agent is often assigned exclusively to the truancy department; compulsory-attendance and child-labor laws are being more systematically enforced; parental schools are increasing their capacity and improving their management; special classes for mental

defectives, or physical defectives, for recently arrived immigrants, and for dull, backward, and over-age children are on the increase; children are being better graded; teaching is better; manual and physical training are made to exert a more wholesome influence; social forces aiming at the betterment of child life are co-operating more and more; and last, but not by any means least, the delinquent is being treated as an individual and not as one of a class.

Truancy and waywardness in children must be regarded as moral diseases and must be dealt with scientifically.

When a physical disease attacks an appreciable number in a community the burden of investigation, research, and treatment is never left to the individual and average physician under whose care the patient comes. Boards of health, associations of prominent physicians, medical journals, university medical schools, endowed institutions of medical research, all set themselves to discover the cause and best treatment for the control and prevention of such a disease. Have you ever read the bibliographical list of what has been said, done, and written by the medical world for the control of tuberculosis, diphtheria, cancer, meningitis, or any one of a dozen other diseases?

Every phase is studied, every primary, secondary, or auxiliary cause is traced, analyzed and made the subject of further special investigation. Every form of treatment, curative or preventive, is tested. Every method of enlisting not only professional but general sympathy, support, and co-operation is employed.

Examine the records of the National Education Association. Among the many hundreds of addresses made under its auspices, how few, how depressingly few papers were prepared in the interest of these school diseases. Here and yon, someone has worked out the problem locally. A few reports show truancy under comparative control; a few records give in general terms the mode of treatment; but at best such treatment is the expression of the personal attitude of one or another man or woman toward the evil. Such practice, no matter how successful in individual cases or places, can never of its own force develop into a science. We need to study and imitate the methods of the medical profession. Leading physicians from all over the civilized world met in congress in Washington last September to discuss only one thing—the most pressing problem in physical disease—the control and prevention of tuberculosis. The danger to the morals of the community from the spread of truancy and other forms of juvenile delinquency is greater and more far-reaching than the danger to the health of the community from the spread of the white plague. Let us study and imitate the methods of the medical profession. Let us demand that a regular or special conference or congress of the National Education Association be held, devoted exclusively to the problem of the delinquent, both boy and girl. Let us call together all who are striving with success to cope with the situation, not only school workers, but social workers and court officers. Let us take the best from all that can be brought together and formulate with wisdom the best mode of scientific

treatment. Let us not wait until those outside of school take the matter in hand. Let us leave it no longer to chance inspiration to deal with our wayward children. What good can come to the child from throwing the blame on the home, the parents, the economic conditions, or the street influences? The more adverse the outside conditions, the more need of effort on the part of the school to rescue the child. Are not the home and the shop and economic conditions responsible in a great measure for tuberculosis? Does that fact justify the hospital or the physician in giving up an incipient case as hopeless? Then what right has the school or the teacher to give up the case of the wayward child as hopeless? Waywardness is a disease, and only when all scientific and sympathetic means have been exhausted without result should a child be placed in a correctional institution.

The successful treatment of tuberculosis is psychic as well as physiologic. So, too, must the treatment of juvenile delinquency be considered. The physician impresses the patient with faith in his recovery. So, too, must the teacher impress the child. She must have faith in him, a faith so wholesome that he will learn to have faith in himself. She must encourage so that her encouragement will spur the weakest to effort. Oh, the effect of a tender word on a parched and starving little heart! Cases of individual rescues effected by a kind word crowd upon me.

Dominick, the little Italian, the terror of three successive schools, who today is not only a fine lad, but who has reformed several other boys, changed from a lawless, defiant misdemeanant to the pride of the class—how? By a teacher who said to him, "I think you are trying today, dear." Poor little chap! He told his teacher frankly that it was her calling him "dear" which developed in him a determination to please her.

The insolent, defiant Irish boy, driven from room to room, who today is working steadily—respectful, law-abiding, ambitious—what worked his reform? A teacher, who in reply to the principal's question, "Well, how is Tom doing in here?" looked at the class in line and noticing that Tom was standing up straight said, "Oh, he's going to be all right. He's the best *stander* in the class." And Tom, poor Tom, the first time he had ever been the best anything, took heart, and worked for further commendation.

Ikey, the little Russian boy, in rags which almost fell from his poor, thin little legs, what changed him from an ugly little outcast to a boy who tried, really tried to do what was right? A clean suit of clothes, a warm bath, and a daily glass of milk, given by a teacher who sensed the boy's needs.

Have you read Owen Kildare's account of the effect upon him of the first gentle touch he had ever felt?

Seldom in his life as a child had anyone said a kind word to him. One day when a strange woman patted him on the cheek he almost cried with the joy of it.

"With a light pat on my cheek and one of the sunniest smiles ever shed on me," he says of the incident, "she put a penny in my hand. She was gone before I realized

what had happened. Somehow I felt that were she to come back I could have said to her: 'Say, lady, I haven't got much to give, but I'll give you all me poipers, me pennies, and me knife if you'll do that agen.' "

Go back to your schools. Pick out your so-called worst boys. Find out whether heart-hunger as well as stomach-hunger may not be one of the symptoms of the disease. There is not a teacher in all our broad land who would knowingly let a child's body starve to death for want of physical food. Why should any child's heart or soul be allowed to starve to death for want of a little sympathy and affection? Bodily starvation, at its worst, can only end in death; soul starvation, at its worst, ends in a hateful, ugly, defiant, lawless attitude toward authority, which not only ruins the starved one but brings disaster to the social order. Does not some blame belong to the school if its teachers fail to feed these starving souls?

What then can the school do to lessen its share of the blame for juvenile misdeeds? Its powers are of two kinds—preventive and corrective. As preventive measures the school authorities must provide—

- Proper medical inspection.

- Judicious grading.

- An attractive course of study tending to make children useful to the community in which they live.

- Classes sufficiently small to permit the teacher to give individual help and inspiration to all her children.

- Vocational training at the age of twelve for all children classed as "difficult cases."

- Free use of shops, gymnasia, and baths, even in primary grades.

- In congested districts free use of school playgrounds after school hours.

- Proper entertainments and amusements given in school buildings to offset low-grade amusement halls.

- Individual, scientific diagnosis of each child's moral defects as well as of his physical defects.

- City relief to the destitute in the form of scholarships to school children.

- A post-certificate class for boys and girls, over fourteen but under sixteen, licensed to work, but out of employment.

As corrective measures the school must provide—

- Special industrial classes.

- Special industrial day schools.

- Special school and home visitors.

- A sympathetic probation system *before* children become criminal.

- An efficient truancy bureau.

- An effective magistrate's court.

- An industrial parental school.

- Close affiliations with children's societies and juvenile courts.

- Improved child-labor and compulsory-education laws, which shall compel the attendance at school of boys and girls between fourteen and sixteen licensed but unemployed.

Much has been done and is now being done by school authorities to check truancy and juvenile delinquency. I wish I might be able to record that the best that is being done has come from the unaided efforts of the school. There is a keen professional jealousy in my heart at the thought that Jane Addams

of Chicago, Ben Lindsey of Denver, John Gunckel of Toledo, and others who have achieved so much in their fight for our children are not public-school teachers. Is there anything that they have achieved that we might not have done had we directed our best efforts along the same lines?

Some of the same professional jealousy rises at the frequent thought that many of the finest men and women now graduating from our colleges enter settlements and other forms of philanthropic social service in preference to becoming public-school teachers. Can any field be found that offers more limitless potentialities for the best civic and social service than the public school? Is it not time for college presidents and college professors in the department of sociology to make that point clear to undergraduates? Is there not more honor in serving God and the state thru the rearing of moral citizens, for a salary paid by the state, than attempting to do a limited amount of similar work for a stipend begged from a philanthropist? I have no quarrel with the settlements or other social movements; in fact I owe much inspiration to some of their fine work. But my heart feels sore at the thought that they are doing much that we might have done, yes, that we should have done. And if we had done these things with the facilities at our command might not, nay, would not they have been better done? Is there no soreness in your hearts at the thought that among two hundred delegates to the Conference on the Care of Dependent Children held last month in Washington, the teacher was a negligible quantity, and the National Education Association was not officially invited to send a representative? Is it possible that the President of the United States believes that the school people have no interest in the subject?

Let it never be imagined that in the system outlined in this paper I am attempting to offer an educational panacea. Governor Hughes recently said "political mischief will exist under any system." So, too, will educational mischief exist under any system; but it is our business to make the system the best possible, and to put into the hands of our teachers weapons which they can most readily use in the crusade organized for child-rescue.

Child-rescue is our duty; child-ruin is our shame. The best way to keep a child from doing something bad is to set him to work doing something good. It is our duty to find the something good. It is our shame if the child chooses the something bad. We have too long laid the emphasis upon the merely intellectual side of school work. A child's soul cannot be reclaimed by means of the multiplication tables or long division. Shall we never learn that lesson? In the great struggles of our nation is it intellect or principle that will win?

But a few days since, the whole country, indeed the whole civilized world, joined in a tribute to the memory of that prince among men, Abraham Lincoln. Would intellect alone have given him his marvelous power? Was it not rather the principle back of the intellect that made him the leader and the conqueror of his time? The inspiration of his acts puts new stimulus into the acts of those, for the preservation of whose country he laid down his own precious life; the inspiration of his words puts new life into the thoughts of those who

would serve God and country. Let me reverently, as one who treads on holy ground, lay before you my final plea, couched in some of his own immortal phrases:

Two score and twelve years ago our predecessors brought forth upon this platform a new Association, conceived in earnestness, and dedicated to the advancement of the profession of teaching and to the promotion of popular education. Now we are engaged in a great civic struggle testing whether the influence of the school is strong enough to combat those adverse forces, born of immigration, economic conditions, parental neglect, municipal corruption, and industrial inequalities which tend to degrade standards of American citizenship. It is not for us to evade the issue. It is rather for us here to rededicate this Association to the cause of delinquent childhood, and to place the teacher at the forefront of the battle against ignorance, inefficiency, vice, and crime. Let us here highly resolve that the school, under God, shall be consecrated to the making of the best citizens, into whose keeping may safely be committed the Martyred President's sacred trust: that government of the people, by the people, for the people shall not perish from the earth.

TOPIC: THE SCHOOLS IN RELATION TO CHARACTER BUILDING

I. MORAL ENTHUSIASM IN THE MAKING

ARTHUR DEERIN CALL, DISTRICT SUPERVISOR OF SCHOOLS, HARTFORD, CONN.

TWO PICTURES OF THE CREATIVE SPIRIT

Whether or not the greatest pictures remain unpainted, I do not know. It is, I judge, something of a human trait, however, to paint pictures. I have never painted a picture in my life, but among those I purpose to paint sometime I will mention two:

The first shall represent the strange-visaged, humorous, altogether delightful Socrates. He shall be seen late at night turning a dark corner on his way home. He is set upon by certain convivial young men dressed as Furies, fresh young guys, we should say, minded to banter him. The picture shall represent him, wholly undisturbed, deliciously ironical, tender, cheerful, even enthusiastic, as he discourses to those jesters learnedly on various matters, especially on temperance. The face of our Socrates shall reveal his generous simplicity, ample courage, charitable magnanimity, infinite patience and goodwill. As he stands there in the gray of the early morning, he shall appear the epitome of the man perfectly at peace with the world, lost in the glory of his creative spirit. In this most commonplace environment our Socrates shall represent the true teacher on the intellectual plane, enjoying to the full the free play of his moral enthusiasms.

The other picture will be different. This scene shall be placed before a temporary theater at one of the German fairs of two centuries ago. The

persons are to be a theater manager, an actor, and a theater poet. They shall be seen to be arguing about the kind of play that should be produced. The manager, mercenary, pleads for the box-office; his interests are in the receipts. The player, debonair, thinks only of pleasing the crowd. The poet, high browed, insists that what glitters is only for the moment, that it is the genuine only that remains unlost to posterity. It is this poet who shall hold the center of this picture. His form and gesture shall command attention. His words shall speak little of the receipts or of pleasing the multitude. His face shall be touched by the light of the morning, and his message shall be of the harmony in the poet's life. His very poise and presence shall breathe forth rhythm, consecration, spring blossoms along the loved one's path, garlands of honor, Olympus and the gods. This poet must teach of that life which is a beauteous entity expressing emotionally conceived ideas on a high plane—the epic life. Goethe conceived it necessary for us to be in sympathy with this poet before we enter upon the mystery he unfolds in Faust. It is this poet who shall personify the ideal teacher on the emotional plane, sane but forward looking,

musical,
Tremulous, impressional,
Alive to gentle influence
Of landscape and of sky,
And tender to the spirit-touch
Of man's or maiden's eye.

OUR ONE BASIS FOR AGREEMENT

Now whether we view life in its utmost intellectual aspect as typified by Socrates, or in this emotional phase as expressed by the poet, the great fact is that life centers normally and enthusiastically in a creative, synthetic enjoyment which I call moral enthusiasm. It is the intellectual moral enthusiasm in Socrates, it is the emotional moral enthusiasm in the poet, it is the heterogeneous moral enthusiasm of humanity that has brought forth all of the full flower of life we know. And because moral enthusiasm is the supreme fact of life, it is therefore the all-important product of our schools. Nothing less than this conception can suffice when we seek for the unity in our educational philosophy.

Simple human relationships, playing, sympathizing, discovering together, defeats, conquests, things seen, things longed for, things done,

sensations sweet,
Felt in the blood and felt along the heart,

these are simple things, but they are the large things that make hope possible for us. Out of these arises the will to go forth and to do. Therefore, the important purpose in the educational process will be seen always to transcend the industrial or commercial, civic or disciplinary, informational or utilitarian interpretation. It will include all of these interpretations, but it will surmount them. When the specialist in "information," the specialist in "accuracy," the specialist in "obedience," the specialist in "self-control," the specialist in

"health," the specialist in the "practical," the specialist in "culture," the specialist in "character," have all had their last word, their common basis for a mutual agreement will be phrased in terms of ethical or moral enthusiasm.

BEGINNINGS OF MORAL ENTHUSIASMS

While all of us are more or less conscious of creative moral enthusiasms within, but few can remember much of their genesis.

To be sure there stands out the mother's influence around one's earliest conceptions and endeavors. The lad develops high resolves out of his mother's ministering affections. The sources of noble behavior flowing from a mother's love are rightfully remembered as of most sacred purity.

But there are other sources of moral enthusiasms. Practically all of you will probably insist that you learned to read when very young, perhaps that you received little aid from the process in the schools. You may agree at times with Teufelsdröch that of that insignificant portion of your education received from the schools, little need here be said; but that early reading experience aroused certain enthusiasms of some moral significance.

You will recall little friendships, big in your boyhood eyes. You may smile as you remember yourself, a boy of ten, seriously in love with a comely maiden a little older. You may tell the truth and say that you loved her with such intensity that you dared not look her in the face. You may add that forever after you have found it easy to understand the meaning of the Hebrew teaching that man cannot see God and live. From that time you date the dawn of the Byron, the Burns, the Heine aspiration in you.

You are convinced that self-reliance came to you from strange little conquests—that crude threshing-machine you built, with which you threshed your family crop of beans; that circus you launched with the aid of some smaller boys, a few stray cats, and a neighbor's calf. You remember boys who whipped you roundly and refused you entrance to the "gang" till you "licked" somebody in turn, which you finally did, to your profound self-respect and gratification. You recall playing truant that you might wander in the woods, tease the birds and squirrels affectionately, or, perchance, that you might smoke cigarettes or chew tobacco with less than indifferent success. Little enthusiasms for Mother Nature, a larger reverence for discipline at home, a more critical interpretation of what is pleasurable, what painful, arose from some such complex experiences.

Once you stole a cent from your grandmother and bought—it was a "Jackson-ball." That "Jackson-ball" was fine candy, and you enjoyed it immensely. But in bed that night you felt the awful pangs of remorse and the darkness was unbearable. You must tell someone or die. In the small hours of the early morning you went and confessed upon the breast of your grandmother, to the great consolation of your spirit. You have done few finer things than that since.

You remember that you learned to split wood, to harness a horse, to husk

corn, to trap woodchucks and other beasts. Against your mother's wishes, you learned to swim. In your own judgment you became the best ball-player in town. You organized a debating club of great importance. You thought it pleasant to stand well in school, and to hear the kindly words of approval from your teacher or parents. You grew proud at times of your own knowledge and intellectual power, perhaps too proud. You saw visions of certain future advantages, and thought you ought to plan for their realization. You heard honor, duty, and righteousness praised, and resolved more or less manfully to be noble, faithful, and decent. You saw a gentle courtesy in some sincere soul, and you went forth to emulate that. The voice, dress poise of one you revered set you to improving your own speech, appearance, manners. You caught a few glimpses of the pageantry in books, and a realizing sense of the ideal swelled in your breast. The patience and sympathetic kindness in your home, the public spirit of the neighborhood or town life, the Sunday-school and church point of view, music and other arts, the day school with its co-operations, its history and literature—these also began their influences early. They are with you now, and they will continue forever. These are also very little things, but they indicate in a measure some of the beginnings of those moral enthusiasms which arose in your boyhood life.

THE ENLARGEMENT OF MORAL ENTHUSIASMS

Then came hero-worship, with all its fine unfolding of enriching enthusiasms. In your younger manhood you were not much interested in causes. You preferred at that time action and personality. You came in touch with the heroes of history, and they began their socializing influence in your life by interpreting you to yourself. Moral enthusiasms developed in you then because of the inpouring of those larger lives molding the world worthily in the past. You were led by these subtle spiritual forces to a finer heroic selfhood.

For example, you came in touch with the Norseman, and he became idealized before you. You saw yourself adventurous, fearless, wild. You saw the skald in you. Your heart would pour forth sagas to the undying ages. The gerfalcon and werewolf and berserker attracted you. In your thinking you became a corsair and followed the sea-mew and cormorant in their flight. You drank "Skoal!" to the spirit of valor in your life and in the heart of the race.

You looked upon the mound-builders. You became a toiler. You felt your own aboriginal weakness. In a blundering way you conceived of yourself perpetuating the memory of your ancestors. You thought of protecting yourself from your enemies. You realized the interest you had in your meal, your body-thirst. But when Columbus came on the scene your industry increased, your courage arose, your perseverance became inflamed anew. You saw in you power and persistence. You became willing to risk for the faith you held. Your soul would up and out.

Perhaps you read of Buddha and of the genuine peace he offers to one-third of humanity. It may have been Zoroaster, Confucius, or some other sincere seeker after the light. Since knowing any of these, bigotry has been intolerable to you.

You learned, as others have done, certain stock things about our Socrates—that he lived in Athens; that he did some service for the state; that he retired to private life; that he was not noted for his beauty; that he stayed out late nights; that he had quite a bit of trouble with his wife; that he taught a number of his personal friends; that he got into dispute with the authorities; and that he was executed. But upon closer relations with this greatest of the Sophists, you were led to catch the scholar's enthusiasm and to respond to the call of patriotism. He aroused you to go forth joyfully, to know, even to die.

You learned of Charlemagne. Then you felt the soldier rise in you, the thirst for power. Your thoughts were thoughts of empire. A romantic color also tinged your horizon. Indeed, you stood uncovered before the outward-reaching arms and the forward-looking eyes of the Christian religion.

You may have sat at the feet of Francis, sweet Saint of Assisi. If so, your soul was warmed by the heart of that "little, poor man of God." You beheld in him a life tuned to the Orphic lute of love. You learned to bend your knees in sincerity and to look up in reverence to the worship of an ideal. You longed to go forth and to realize this ideal upon earth.

You may have contemplated Leonardo da Vinci, infinite and forever questioning; if so, you became lost in wonder before this greatest mind of all minds. You returned to your little tasks humbly, but refreshed and inspired by his tremendous example of the potential in a human life.

It may be that Giordano Bruno awoke you, stirred you to honest action, made martyrdom possible for you, strengthened you for the inevitable struggle of life.

Goethe touched your spirit with his magic wand, and the storm and stress of his early life found sympathetic response in the struggle of your own youth. His later writings sounded for you the cry of humanity. Since knowing him you would that you yourself might soothe the wounds of the world with the music of some song.

You heard of Charles Darwin. Your first information about him was that he was the author of the theory that man has descended from the monkey. You learned that Darwin has rarely been highly thought of by the ministers. But the more you examined the great work of this man, the more you became able to rise above suffering, the more you sat in his study and learned the value of little things.

Another man touched the orbit of your life. You looked upon his rugged homely face and you became aware that you are an American citizen, proud, glad that you are one among this splendid, dawn-crowned people. You felt yourself triumphant in the poverty, simple sincerity, native humor, and far-seeing intelligence of our Atlantean Lincoln.

Perhaps, finally, for some years you shared the general conception of Ralph Waldo Emerson. You conceived of him as living in Concord, and writing prose that can be read backward as well as forward. You have heard him called the Yankee Plato. You learned that for some reason he has been called a poet. But with the passing of the years, and upon closer contact with this serene, lofty, yet uneventful life, you beheld that he supplemented Buddha's asceticism in you with a fulfilling enrichment, your Socratic rationalism with an added insight, your longing for something of Charlemagne's imperial splendor with an enriching simplicity, the sweet self-abnegation of your Franciscan moments with an affirmation of this present world, Leonardo's many-sided interpretations of your various aspirations with a music of a cosmic unity. You found that Bruno's zeal for martyrdom, having no attraction for Emerson, had therefore less for you. The storm and stress in Goethe lost their appeal to you as you walked with Emerson. Darwin's careful researches in science settled into saner categories for you as you paralleled them by the side of this man's persistent researches in the depths of the human spirit. If Abraham Lincoln represents the practical hemisphere of your interpretation of the last century, Emerson certainly reveals the ideal. Looking upon him, you aspire to incarnate your faith and philosophy in a consistent, rational, beautiful life. Emerson easily becomes, therefore, the apotheosis of your highest self. You come to feel at last that you know him, that he is your poet indeed, an incarnation of what you long to be, a Pyrenean spring of overflowing creative moral enthusiasms.

CERTAIN IMPLICATIONS

In some such ways, most briefly drawn, we see our moral enthusiasms in the making. These incitements touch and arouse one, not so much by their appeal especially to one's imitative instincts, to one's vanities, to one's intellect, to one's emotions, to one's volitions alone, as by their permeating, molding, transforming influences within one's total personality.

Our day presents little cause for despair. Moral enthusiasm is still working among men across the world. The remarkable movement toward a national temperance in America; the effective anti-opium laws and other reforms of China; the rich spirit of fraternity among our American republics; the unprecedented co-operative behavior of European states; the onward reaching strides toward a higher civilization in Africa and the Orient; the hopeful dawn of a larger vision of international brotherhood; our splendid awakening, following the heroic rush of our Titan Roosevelt—these all indicate the unmistakable upward climb of humanity.

To be sure we have much yet to do. With one among every ten persons of our large urban centers buried at public expense; with ten million paupers festering among us in this land of plenty; with one among every seven of us doomed unnecessarily to death from tuberculosis; with one and one-half million children laboring in pursuits to the detriment of the nation; with 50 per

cent. of our people property-less; with churches, industries and schools trying to solve their problems separately and often in opposition to each other; with caste distinctions and class estrangements unhappily reappearing in the thought and practice of our folk; with corporate injustice in many quarters inviting social disaster; with hazards of industry increasing; with laborers turning into machines and fingers losing pride in the perfection of their products; with our blatant emphasis upon petty programs—with these pressing upon us we need not fear that opportunities for moral enthusiasms to play their part are lacking. To abate our depressing poverty, to lessen the evils thrust upon us by our sudden industrial crises, to promote a more equitable distribution of the products of honest toil, to establish larger and better organized bodies of facts, to hold up the hands of the various leaders striving for a perpetual peace among the nations, every possible help is needed. To such appeals the schools must bring an ardent, intelligent, and worshipful spirit; not programs and systems, but insight and devotion.

The aim of education is to create a clean physical dynamic, to develop from this a practical intellectual ability ending in a moral enthusiasm for the service of man.

A government commission tells us that the main reasons for being out of work in America are inability, inefficiency, and unwillingness. The only hope in such a situation is that by some agency there may be aroused a larger devotion to ideals, an increased moral enthusiasm.

Thus that picture of the intellectual Socrates begins to blend with that picture of the emotional poet into another and larger conception. As the pet schemes of man advance and pass to their fall, moral enthusiasm is seen to remain, working its miracle of gradual upward human growth, blending our faiths in a total personality, an "Uebermensch." The task of the public school is to help in the perfection of this "Beyond-Man."

In our fitful attempts to do this we have turned this way, we have turned that, but at the last we come reverently back to the teacher:

Honest beacon throwing light across
Savage age, barbarian misery,
Guiding civic strife to human peace,
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.
.
Opening the minds of coming men
To the starward reach and march of man.

That nation is safe whose teachers transcend mere instruction and training, and rise to their work in humility as they ignite the divine spark in other lives by the touch of their own fine enthusiasms and generous loves.

The spirit of the Lord is upon me, because He anointed me to preach good tidings to the poor: He hath sent me to proclaim release to the captives, and recovering of sight to the blind, to set at liberty them that are bruised, to proclaim the acceptable year of the Lord.

Is it not in this fine enthusiasm that we shall find the hope and opportunity of the public school?

II. MORAL TRAINING IN SCHOOLS

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The question: Shall moral training in public schools be given directly or shall it be given indirectly? arouses controversy. Would you have definite classes in ethics, or the moral influence of good teachers? I answer: Both. If you are asked when hungry whether you will have bread *or* butter you would say bread, but you would get far more satisfaction out of bread *and* butter. So it is, I believe, that direct ethical instruction supplements the pervasive moral forces on which we all depend for life.

Many papers on moral training argue thus: How excellent is the indirect moral training of sloyd, literature, and an inspiring teacher. Therefore let us have no direct ethical teaching. I argue: Because of the excellence of moral training thru sloyd, literature, and an inspiring teacher, let us make its results more sure. Let us re-enforce this indirect moral stimulus by a direct and special training in learning to think directly, sympathetically, and decisively on questions of right and wrong.

It is often asked: Why should ethics be taught in a cold-blooded way as a set lesson? Is not the indirect influence of devoted parents and teachers far better than any direct teaching can be? Is not work well done a more valuable training than flawless knowledge of right and wrong? To which I answer: *Certainly*, but why not both? We improve in character largely in three ways: (1) by imitation of noble people whom we love and who trust us: (2) by responsibility sturdily shouldered; (3) by learning to think directly, sympathetically, and decisively on questions of right and wrong.

Imitation and chosen responsibility, these two spurs to righteousness, secure immeasurably greater good than we can get by direct teaching. But no one who has ever lived has doubted the motor force of friendship and responsibility in upbuilding character. Therefore I shall speak of them here no more. It is delightful to speak of that about which we agree. It is profitable to speak together of that wherein we differ.

I shall then speak of direct teaching of ethics in schools as enforcing and supplementing the far more important moral training which comes thru reverence for people and thru loyalty to any chosen task. The direct teaching of ethics aims: (1) to open the eyes of the morally blind; (2) to clear away moral confusion; (3) to forestall moral vacillation. Can a course in ethics result in thus training pupils in sympathy, in truthfulness, in loyalty? Let me illustrate from actual experience.

First: Many wrong acts are due to moral blindness or, in milder cases, to moral myopia rather than to intentional brutality. The cruelty of a child who pulls a fly to pieces and the cruelty of a gossip who pulls a neighbor to pieces are not deliberate delight in pain. They mean shortsightedness to pain. In my older classes with girls of the high-school age I take up questions of

unconscious cruelty and try to train them in sympathy and in open-mindedness. We discuss for example the famous couplet:

I do not like you, Dr. Fell;
The reason why I cannot tell.

This sentiment has often been accepted as valid and even commendable. "I either like a person or I don't and that's all there is about it." But how about Dr. Fell himself? Is he fairly treated? If he is sensitive to public opinion is he likely to become mellow and genial under the influence of this unreasoned dislike? It is very likely to turn out that he's a good kind of fellow after all, and that what we disliked was his table manners or the cut of his beard rather than the man himself.

Dr. Fell is sufficiently aloof to discuss freely. He will, however, recall to the minds of the class someone whom they have disliked and thereby injured without a cause. I remember now, with repentance, a girl at school whom all of us undertook to dislike and despise simply because she had very pale eyelashes, sticky hair, and a submerged voice. We endowed her with every wickedness; we spoke coldly and shunned her in spite of her somewhat cloying desire for our society. I dread to think how she may have suffered from our unconscious cruelty. She didn't die young, however; she married and lived happily ever after. Girls and boys have at times an icy brutality. Yet it melts when the warmth of understanding touches it. It is not hard-heartedness, it is unawakened imagination. As you speak, "Why I never thought of that side of the question," they say and a new look comes into their eyes.

A watchful teacher, a loving mother, would of course tell her child how unkindly he was treating a comrade if she realized it. But children who are having a hard time are often dumb sufferers. The teacher does not know of the unconsciously inflicted cruelty. By arousing sympathy we may anticipate the difficulty and by encouraging imagination dispel cruelty.

"A man to be greatly good must imagine intensely and comprehensively," Shelley said in his "Defense of Poetry." "Is this true?" I ask my older girls. And they all see the point—they have grown to realize that to be truly sympathetic one must be capable of putting himself vividly in another's place.

I lay stress also on the doctrine that we must not judge any act without knowing the facts of the case. "See that man! He has sat on the bank all the morning throwing pebble after pebble into the water. How lazy he must be." "Is this a fair judgment?" I inquire. And at the end of a warm discussion, I tell them how Turner the artist did that to watch the surface of the water in motion and learn how to paint its sheen and color. "A child is walking quietly along the sidewalk. Suddenly a rough-looking man seizes her and pushes her into the gutter. Is he cruel?" Of course every one answers yes, at first. But no—a mass of ice is about to fall from the roof above the child's head. Her assaulter turns out to be her protector.

In teaching, of course, every good teacher passes from examples to principles. Thru such examples as these we elicit the fact that we can judge

no act on sight, for every act is open to a good or a bad interpretation. The eager energy members of my class show in pointing out possible good motives for acts that at first sight look selfish makes me feel sure that they will not in later life condemn unheard. "The special part of this ethics course which stands out in my mind as important," writes one of my pupils, "is that on right and wrong judgments. It makes me realize how little right we have to judge people from appearances. There are so many sides of people's characters that we don't half consider or appreciate."

Second: Direct training in ethics helps to clear away moral confusion and to develop sound and sincere thinking. There are many grades of confused thinking; it varies from the truly pitiable muddle of a well-meaning mind to the expert juggler in words with a wink in his eye. But even in its mildest form confused thinking is moral degeneration. At its worst, confused thinking is a weapon of self-defense when we know we are wrong. The grafting insurance-company director, the blackmailer of trusts, the briber of legislators, are confused in elementary moral thinking. Some of them are experts in the art of self-delusion and scatter darkness around themselves as the inky cuttle-fish conceals himself in the pitch blackness of his own elaborated fluid. Many are simply misled or confused. And is it possible that this deplorable condition of deliberately or unconsciously confused thinking extends to many of us highly respectable people, doctors, teachers, and ministers who are not yet found out publicly?

Can anything be done to stop the spread of the disease of moral confusion? I answer decidedly, yes. Most of all by indirect moral training thru constant contact with people of morally crystal clearness, thru training in exact science, thru the bearing of open responsibility; but also, I am convinced, thru direct training in definiteness and accuracy of thought about right and wrong. With my younger classes of girls of twelve to fifteen, I take up very elementary cases to bring out the difference between sound and confused thinking.

"What is the difference between a poor excuse for being late at school and a real reason for being late? Give an example." Out come examples of oversleeping or dilly-dallying as contrasted with the unavoidable fact that the cars were blocked. "An excuse is hollow; a real reason is stout and whole." "An excuse is a method of concealment; a good reason is its own justification." So write my girls. One delightful girl of twelve explained, "This morning I was late but I had a real reason. When I went upstairs after breakfast to feed my animals, my very favorite guinea pig, Christopher Columbus, was so sick that he could hardly stand up. I had to stay and make him comfortable, and so I was late to school. But the teacher said it was a good reason." Echoes of the difference between poor excuses and good reasons resound for several weeks. "Today I have no reason for being late, only an excuse. I didn't know what time it was, but then I ought to have found out."

With older pupils I take up more complicated cases illustrating the tendency

of any selfish person to deceive himself or herself. "I am traveling from New Hampshire to Boston with a large number of bundles and am delighted to secure an extra seat on which to deposit them. Gradually the car fills up and all who pass by look wistfully at my seat. If I continue to keep my parcels on it by what arguments can I pretend that it is right?" We bring out together all the half-conscious sophistry that clings like a burr to selfishness. "There may be seats farther on; if they want the seat they can ask for it; it would only crowd anyone to sit with me; it is really more comfortable for her to stand." Everyone in the class realizes that these excuses are weak subterfuges; for, as one girl said, "Such sputtering people deceive themselves."

By the path of excuses and sophistry, people pass onward to disastrous proneness for telling lies in words that are literally accurate. We need a far higher standard of truth among us. I believe that early training in the full value and the real meaning of truth-speaking will help to keep us mentally clear from corroding self-deceit. In my lessons on truth I ask the question: "If by saying what is literally accurate we intentionally give a false impression, is it any less untrue than if we told a direct lie? Which seems to you the worse?" "Prevarication," writes a thoughtful girl of seventeen, "is taking refuge behind truth. It is like the Indian method of shooting from behind a tree. It is better to be honest in your dishonesty than not to be honest at all."

It is important for our whole nation that truthfulness shall be recognized as the conscientious effort to convey the accurate impression, and that all intentional misleading of another by word or silence shall be clearly marked "lying." We need a pure-truth law as much as a pure-food law. Confused thinking is shown not only in the tendency to self-deceit and sophistry but in the trick of turning attention off the main issue: "Whoso doeth the truth cometh to the light that his deed may be made manifest."

I am convinced that many glaring crimes and endless cankers of the soul are due to lack of the trained will to face the full light of truth, and even more to perplexed thinking. An Irishman in my city, to help a stupid friend, very kindly passed the civil service examination for him, swearing falsely of course, and forging his friend's name. He was found out and sentenced, but the body of public opinion among his set excused and even commended him because his motives were kindly, and on being released from jail he was banqueted and re-elected to the legislature. I think there was real confusion of thought in this case, and that this confusion will continue to disgrace our political life until we can bring the growing generation to see that kindness to an individual is not to be put ahead of truth or of loyalty to the laws of the nation.

In my classes I take up among other examples a rather extreme, but to them intensely rousing, one which I found quoted from a German newspaper. "An officer is sent out to arrest a thief. As the thief sees his pursuer coming, he starts down a side street and across a frozen river. Just as he is landing on the opposite bank, he hears a crash in the ice and realizes that the officer has

fallen thru. Turning back at once the thief dives and at the risk of his life pulls the officer out. Ought the officer then to arrest the thief or to let him go?"

I take up this highly dramatic tho somewhat improbable case because it is eminently discussable, because it is sufficiently remote not to suggest a nagging personal application, and because, nevertheless, it definitely exemplifies the general principle that obedience to law, loyalty to one's duty, must be put ahead of individual kindness or gratitude. Almost invariably some members of the class will stand up hotly for letting the thief go. As I came away from my class this winter after defending the duty of the policeman to keep his oath, arrest the thief, and help him later in every possible way, I heard two girls murmur to one another, "Poor thief; it might embitter him for life." But a week or two later one of them said, "I have entirely changed my opinion about the question of arresting the thief. Now that I have thought more about it and have discussed it with wise people I see that I was wrong."

Examples such as these illustrate a fragment of the effort that can and should be made thru direct ethical teaching to train our future citizens to think straight. "To think is the moral act," writes Professor James. Especially, I would add, to think clearly and impartially in spite of temptations to sophistry. This power to think does not come without training and it is rare. Chesterton says: "Our long comfortable words save modern people the toil of reasoning. Long words go rattling by us like long railway trains. We know they are conveying thousands who are too tired or too indolent to walk and think for themselves."

Again, direct training in ethics leads thru thoro and decisive thinking to thoro and decisive action. Every teacher knows two types of unhappy pupils. The first I call the June-bug type. He blurts ahead, he hits the ceiling, comes down hard on the ground, is desperately sorry, and will never do it again—at least, not till next time. He has the confirmed habit of acting first and thinking afterward. The second type I may call the unfledged-robin type. He is hesitant; his wings flutter as he stands on the edge of the nest clinging to inaction. Such a person sees difficulties in every decision made and regrets in all he has done.

Type one is not easily reformed and he undoubtedly learns more by becoming deeply interested in football or sloyd and finding out what thoroness means in these fields than he does by thinking. Yet the less severe cases of his type (and the disease is more common than measles and far more recurrent) can be helped by training in thoro thinking on questions of right and wrong.

With girls I ask: "Describe the conscientious and the unconscientious ways of practicing a piece of music? What are the principal differences?" They all know. With boys the question would take a different form. "If you were elected President of the United States and had to decide whether or not to give the Filipinos an independent government, how should you go to work to make a decision?"

By questions such as these I start the consideration of the meaning of thoroughness in thinking. I then go on to examples near at hand. "If you have a hard piece of work to do, will thought about it make you do it faster or slower in the end? Give an example." The range of examples is often amusing: Baking cake; Admiral Dewey making plans at Manila; a difficult interview; putting out a fire; Christmas shopping; a boating accident. We discuss every example brought up, and find out in just what ways thought before action helps us to remember the flavoring in the cake or the feelings of the irritated friend in an interview. After we have discussed questions of this kind, I give detailed and graphic examples of persistent and decisive thought: Darwin's study of his specimens, or Grenfell's facing of the situation when adrift on an ice-floe helps to bring before the class the vividness of an embodied ideal.

I spoke of a second type of pupil, the one who hesitates and vacillates in thought and action. There is a widespread idea that such pupils will be hurt by the study of ethics. My experience is exactly the opposite. Such students are puzzled by thinking because they don't know how to think. But they are bound to think anyway; therefore show them how to think straight and when to stop. If a child can't be kept from deep water, teach him to swim. If a girl can't be kept from deep thinking, teach her to think well and decisively. A strong impulse can't be crushed, it must be guided.

I am often astounded to find that a sensitive girl in my class has been troubled and puzzled for years over questions of truth-speaking, the right choice of work, or the proper ways of spending money. She has been puzzled and troubled because she had not power enough to work out the problem once for all. It is common, I find, for such a girl to trouble herself deeply over the old Hedonist idea that all her acts are selfish. She defines a selfish act as one done for yourself, because you want to do it, and then blames herself for doing everything selfishly. One of my class this winter wrote in her paper on selfishness, "It is hopeless to think of this question too long for it brings you to the opinion that everyone is selfish—which, of course, cannot be true. I have puzzled over it so many times that I can't wait for next Monday for you to clear it up."

Now this tangle *can be cleared* by a true definition of selfishness, and often worry put aside and happy thought installed in its place. I insist on the difference between thinking and worry. Thinking goes straight ahead but worry goes round and round in a circle. It is never right to worry. We discuss and condemn the vacillation in Hamlet. We distinguish acts that should always be instinctive like the movement of our feet in running downstairs, and acts that need the guidance of thought as when we must make an important decision. Finally, I ask the class to give examples of the occasions when we ought to stop thinking. It comes out about like this:

We should stop thinking: (1) when no new evidence is at hand; (2) when the subject is trifling and thought about it wastes our time; (3) when we need

rest; (4) when we find ourselves arguing falsely; (5) when our ideas go round and round instead of going ahead; (6) when it is time to act.

Let me sum up what I hope I am doing in these ethics classes. I hope that I am making, as it were, a museum of interesting and practical examples of right and wrong action and bringing them before my class in a living way. Every example I take is chosen as remote enough not to have in it the element of preaching, and yet such that a parallel case may at some time in his life meet the student. Indirect moral training helps us to face a certain accidental number of experiences well; direct ethical teaching anticipates a difficult problem and anticipates it at a time when it can be looked at without passion or friction. My hope is that by getting a stronger grasp on sympathy, truth, and loyalty my students will be more ready to meet the crisis of their lives.

To sum up: My experience convinces me that direct training in ethical thinking among students of the upper-grammar and of the high-school grade can and does free them in three ways: (1) by enlightening moral blindness; (2) by clearing away moral confusion and sophistry; (3) by overcoming moral vacillation. Certainly a large proportion of wrong-doing is due not to wilful, deliberate desire for evil, but to lack of sympathy, lack of clearness, lack of persistency and decisiveness. Clearly then the teaching of ethics is worth while if experience proves it to develop sympathy, truth, and loyalty. Here in Chicago, in 1893, you welcomed the nation to the great exposition with the words: "Ye shall know the Truth and the Truth shall make you free." The study of ethics in its deepest meaning is a search for liberating Truth.

III. MUSIC AS A MORAL INFLUENCE

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A man may express in music his noblest emotions but it never will tell a miser's love of gold. Real music vitalizes as nothing else can. Even a brass band will transform the hurrying, jostling crowd on a busy thoroughfare from work-a-day to holiday life. All faces brighten, all steps become buoyant.

No orator can move an audience as does the simple song of the singer. The nerve-tensioned are let down. The downhearted are lifted up. All are equalized, brought to normal life and brotherhood. But why is it so short-lived? Why does it come and go so quickly? Listen! All that was once known of electricity was the lightning flash; in less than a second after, all was darkness again; few people saw permanent good in it. But now—well, it has changed the face of the world. The young generation will find it hard to realize how people ever got along without electricity.

As in electricity, so in music! We have not learned half its uses. Many singers only think their songs, and their voices lack heart. Other singers have sentimental voices; they feel so much, but they have no fiber, no will. No one would think of turning to them for help. Then there is the voice that only wills; the voice dominant to harshness; manhood without brotherhood. All

these voices are incomplete. The voice of true individuality must express the allness of life, must have in it the overtones of heart and head and hand.

Many years ago I had the felicity to discover in music and song a "new force in education." I found that the voice-vibrations of the singer were not restricted to emotional expression, but included all the powers of mind and body and spirit. I discovered that the engendered powers, instead of being dissipated in performance to "vivify" an audience, were capable of being reflexed on the singer's self; an enduring energy that did not pass with the cessation of the voice-vibration, but, dynamo-like, stored itself for future use—a sort of auto-activity.

With this good news I went to the music profession, to the school supervisors, and finally to the school teachers who, from their companionship with and knowledge of the individual child, as I am now convinced, are best able, under the guidance of their music supervisors, to handle my work. In doing this I have reduced the exercises to simplicity and, I trust, to the unity of truth. All this has taken many years of work, but these years will have been well spent if it should prove that this new music force, energy, call it what you will, is a factor in the solution of the great problem which faces school men today. It is to this problem and its solution, and especially the part that music and song may play in it, that I wish to direct your attention.

Two questions face school men today: First, how to develop in our youth morals, respect for authority, a sense of social responsibility; in a word, character. Second, how to find out what occupation in life each pupil is most fit for—industrial, commercial, professional—that he may be prepared accordingly.

These questions are embraced in one general proposition—a dual one; viz., that life, expanding by leaps and bounds, has reached world-wide proportions; and that to meet this allness of life-at-large, all the powers of the individual must be aroused. He must live the larger life in the larger way.

These powers are roughly classed as outer, inner, and innermost: The outer powers: the physical body and the senses; the inner powers: mind, heart, and will; the innermost powers: spirit.

These powers must not merely be aroused; they must be developed, must be co-ordinated by use, unified in a common purpose—in a word, related to life-at-large.

This relationship is threefold: egoistic, altruistic, and cosmic. It stands for manhood, brotherhood, all-fatherhood; and there is not a problem, large or small, in your life or mine, that cannot have light shed upon it by this one general analysis: what is due to myself, to my brother, and to God.

When life-at-large was on a small scale the physical powers were all-sufficient: to be strong of body, swift of foot, keen sighted, sharp of hearing, full of prowess. But, with the rise of community life the inner powers came into action and the body physical became subject to mind and heart. In all this there was a correspondence between the developing outer life and the evolving inner life.

Nowadays, when life-at-large has developed beyond community boundaries, it is time for the individual inner life to evolve correspondingly. And if, as appears, it does not do so, we should look for the cause of the trouble and, like a good gardener, seek to aid nature in restoring equilibrium.

While the process of the ascent of life is, in the main, gradual, there come at wide intervals great and rapid changes in which life-in-the-aggregate assumes wider aspects to which life-in-detail must adjust itself. At such times there is a transition-confusion like a house partly dismantled for necessary enlargement.

We who regret the passing of the old-fashioned parental authority and the lack of unquestioning obedience in the child, may do well to consider the present confusion as preparatory, perhaps, to a new kind of obedience—self-motivation, self-control, self-responsibility, and thru these, greater self-realization.

But at the present time, there is a confusion worse confounded, not due solely to transition, and for which we must account in some other way. Our life as individuals is not only out of harmony with life-at-large, it is in false relation with itself. We are not only out of balance with the world, we are out of gear. To come from the general to the particular, the individual intellect has been expanded to world-wide interests and the feelings have not; on the contrary they have been suppressed, held down near to the narrowed lines of domesticity.

This being the cause of the trouble, the remedy lies in enlarging the scope and breadth of the feelings to cosmic relations, or at least relations corresponding to the scope and breadth of the mind. This constitutes the problem confronting the schools today. To solve this problem will supply that missing link, in default of which our relations are circumscribed, in default of which we can never be ourselves, can never feel the content of completeness, individuality, the creative life—in short, character. We can never show what we are and, therefore, what most fit for in working out our own welfare, as also the world's welfare.

How then to enlarge the feelings: It cannot be done by extending the altruistic relations to cosmic proportions, to feel for Asiatics as we do for kindred, neighbors, friends, whose hands we clasp in ours and into whose eyes we look.

To find a solution to our problem, we need look but a moment to the source of the feelings and their growth in the past, their rise and progress. In primitive life, man's needs were few and simple, and based on the desire for life, and the recognition of the value of life, its preservation, expression, and progression. All of these were based on the simple proposition to get food, get raiment, get shelter. With the rise of social life came altruistic feeling—the give-and-take of life.

With the further rise to cosmic life, a new and larger feeling came; viz., to give, with no thought of to get, and with no thought of give-and-take. This universal life is based on giving one's self and there is this difference between it and all lesser forms, that, while in the lesser life one must first have in order to give, in the larger life one must first give in order to have. To give a loaf

or a blanket, one must first have it, and to give half of these is to lose that half; but with love, honor, loyalty, truth, one must give to have, and the more one gives, the more one has. These then are the universals, the imperishables which form the cosmic life.

So then, as railroad systems and steamship routes traverse the highways of the physical world, and as the international postal service and wireless telegraphy form great highways of the world for the transmission of ideas, so these noble causes are great highways which join men's feelings in a world-wide unity.

Professor Royce says that when a man is joined to a noble cause in a spirit of loyalty, in regard to which cause all that he is and has he counts as nothing in the scale, that man is joined to every other man who bears that cause in the same manner and degree; and he might have added with truth, no matter on what other continent, or in what century the other men live.

This, then, is the full scope of my feelings:

First, the egoistic life—to get. In some things I must be fair to myself, else am I not honest.

Second, the altruistic life—the give-and-take of mutuality, of social life.

Third, the cosmic life—to give; to give one's self; to sacrifice.

Nor will it serve to compromise on some given point of view for all three of them. They are on separate planes, three in one—a unit, and yet distinctive.

Now, as to school children. We assume that they have the first and second planes. Now how shall they get the third, the cosmic plane?

First, what great cause in life can a little child espouse? What can he uphold with all his strength? Second, what can he give of himself in the furtherance of his ideal?

As to the first, there is his appreciation of the value of life, with all its richness of health, of powers of body and mind, of his senses, his companionship with his playmates—in a word, his sense of the joy of life. As to the second, he can give himself in his own breath.

IV. THE AMERICAN PERIL

JOHN W. ABERCROMBIE, PRESIDENT OF THE UNIVERSITY OF ALABAMA,
TUSCALOOSA, ALA.

Is there an American peril? Of what does it consist? There is a danger peculiar to our country, and it consists of the spirit of lawlessness. Disregard for law, man-made and God-given, is widespread.

LAW AND LIBERTY—TYRANNY AND LICENSE

All good government is based upon law and liberty, and thru a proper blending of these two elements is the best development attainable. Each is an essential element, and each has its counterpart, for law may be perverted into tyranny, and liberty may degenerate into license.

Observance of law promotes orderliness, but excess of liberty leads to license. Law and liberty are the handmaids of civilization, while tyranny and license are relics of barbarism.

Human nature, lower human nature, rebels against law and abuses liberty; but, thanks to an all-wise Creator, there has been implanted in man, side by side with his lower nature, a better self, which, if properly cultivated, develops into a controlling force in life. And one of the most marvelous characteristics of the human mind consists of its ability voluntarily to set up for this better self a high standard, and strive to attain it. When the better self rules, law and liberty are exalted; when the lower nature prevails, tyranny or license is enthroned.

America was settled by those who sought escape from injustice on other shores, and it is not surprising that, from the beginning, there has existed a tendency to stress individual liberty, and to minimize the importance of law and its orderly execution. That tendency has found its way into all the affairs of life, and as a result the country is drunk from very excess of liberty.

Only now and then, only here and there, has law been emphasized to the point of tyranny.

PREVALENCE OF LAWLESSNESS

The evils of unrestrained license are visible everywhere—in business and society and church and state; but the most alarming phase in which the spirit of lawlessness manifests itself is that of homicide. The frequency, the recklessness, and the impunity with which human life is taken should bring shame and fear to every patriotic citizen.

In no other civilized country is life so cheap. In pagan Japan, even, it is valued ten times more highly. For each million of population we have annually about eight times as many homicides as Belgium, about nine times as many as France, about twelve times as many as England and Wales, about twenty-five times as many as Germany.

With ten thousand homicides yearly, and with a like number killed by railroads, factories, and mines, this is indeed a land of reckless human life. And how many of these are the victims of greed? Of license? of lawlessness?

LAX LAW-ENFORCEMENT

What is being done to remedy the situation? It is common knowledge that murderers are rarely punished adequately. If the accused be wealthy or influential, and the victim be poor or unknown, acquittal or light punishment is practically certain. If the slayer be of the negro or other colored race, and the slain be a white person, no matter how worthless, conviction or lynching is the usual result. Seldom, except when equal slays equal, is impartial justice administered. What a sad commentary on our boasted civilization!

Laxness in law-enforcement is limited to no state or section, and the increase in murderous crime grows at a bewildering rate. Everywhere we have excess

of liberty, unbridled license, barbaric lawlessness. Both by retail and by wholesale do we kill. If this spirit is not checked, the country is doomed.

THE LYNCHING EVIL

Reference has been made to lynching, and therein lies the most alarming feature of homicidal crime. At first, for justification, the "usual cause" was assigned; then, murder and other felonies; then, misdemeanors and trifling offenses; then, mere race membership. Negroes have been lynched because they were negroes. Worse than that, they have been taken from the officers of the law, even from the temples of justice, and murdered. And this has been done when legal conviction and punishment were certain and imminent.

At first, lynching was infrequent; now, it is frequent. Then, only negroes and uninfluential white men were the victims; now, people of character and standing without regard to race are executed. The mob spirit, whether it manifests itself in the "night riders," the "white-cappers," the "race riot," the "black hand," or other form, is no respecter of persons.

And the lynching evil, like other forms of homicide, is confined neither to section nor to state. One is constrained to wonder if the court is to be superseded by the mob; if self-government is to prove a failure; if the result is to be complete anarchy—a drifting back into the darkness of barbarism.

POPULAR GOVERNMENT JEOPARDIZED

That there must be a reversal of the tendencies of the times is clear, for popular government is jeopardized, civilization is in the balance. The masses must be made to realize that lynching, however great the provocation, is indefensible; that it degrades and brutalizes all who participate, even all who witness or condone; that crime is not a preventive but a producer of crime; that lawlessness begets greater lawlessness; that hatred and revenge breed hatred and revenge.

Officers of the law must be made to realize that yielding to the mob is cowardly, criminal, traitorous; that it is better for the lives of many lynchers to be taken, if necessary, in a successful effort to enforce the law, than that a single life, even that of the most depraved criminal, should be sacrificed to the mob.

Oh, for a copious outpouring of the spirit of honesty and fearlessness in the execution of the laws of the land! Not till then will the highest function of government—the protection of human life—be fully established.

MORAL TRAINING NEEDED

A proper attitude toward lawlessness is not possible except thru the processes of education. Only thru the cultivation of mind and heart can a people be advanced in civilization, and prepared for the highest form of self-government.

This training should begin in the home, for it is there around the hearthstone and the mother's chair that lessons of love, truth, obedience, and fidelity can be best inculcated. The homes of the land should be the birthplaces of that incorruptible character, that stalwart patriotism, and that unflinching courage, so necessary in governments where the people rule.

But the home is failing in this important duty. The father is engaged too strenuously in the race for wealth and power to perform the duties of fatherhood; the mother is too busy in the equally strenuous social life to meet the responsibilities of motherhood.

It is obvious that, under existing conditions, we cannot look to the home for the training which will prepare adequately for citizenship. The undisciplined child grows into the lawless citizen. The lawless citizen is the liar, the swindler, the thief, the grafter, the robber, the ravisher, the lyncher, and the murderer.

Can this training be given by the church? Is the church giving it? While I have an abiding faith in the efficacy of the work of the church, I see little hope of speedy and adequate relief from that source, since only a small minority of the people are reached, and they only one hour per week.

The Sunday school is a great institution, is performing a noble service, and is one of the most elevating of agencies, but who will assert that it is providing the necessary moral training for all the people?

What about the press? Newspapers wield a mighty influence, and that influence is usually in the right direction. The press is a great educator, and is powerful in its advocacy of the supreme importance of law and order, but it does not reach adequately the citizen at the most impressionable age.

THE PUBLIC SCHOOL THE ONLY HOPE

So, for an effective check upon lawlessness, we must look to something besides the agencies mentioned. What is that something? It is the school. To the school, especially the public school, must we look. Upon the teacher in the school must we rely. It is the teacher's work to apply correct thinking and patriotic acting to the solution of perplexing problems, to erect high ideals and build up to their full stature, to nourish and direct and preserve the public. Knowledge is power, and an educated conscience is its only safe guide.

The children of the land, rich and poor, farm and factory, white and colored, native and foreign-born, all must be taught to obey the Golden Rule. The meaning of the command, "Thou shalt not," must be so impressed that it will never be forgotten or disregarded.

Along with mental and physical development must go moral culture. "Thou shalt not lie," "thou shalt not steal," "thou shalt not kill," and all the other "thou-shalt-nots" must be inculcated so systematically, so persistently, so effectively, that proper regard for the rights of others shall become a fixed principle in the life of every man and woman.

COMPULSORY EDUCATION NECESSARY

The lawless rich and the anarchistic poor must be placed upon the same plane in the administration of justice. To that end, preparation for citizenship must begin in infancy and continue thru school life. To that end, also, every child must be required to attend school an adequate length of time.

If it is the state's duty to provide schools, equally is it the state's duty to send its children to the schools. Shall the state sacrifice the citizen and endanger its own stability and efficiency by permitting children, thru the neglect or cupidity of unnatural parents, or thru the avarice and inhumanity of grasping corporations, to grow into manhood and womanhood, dwarfed in body, mind, and soul? Such a policy is suicidal.

As a remedy, then, for the evils which beset us, I would prescribe for everybody education of the right kind—education of body, mind, and conscience, with special emphasis upon the last mentioned. To that end I would have government—city, county, state, and national—to make the utmost endeavor.

CONCLUSION

I would not have you believe me to be a confirmed pessimist in my views as to the country's future. I am not. Beyond the storm-clouds I see sunshine. Great crises are necessary to develop what is best in a people.

Adequate leadership has never failed to materialize when the country's safety has been imperiled. Such leadership is now preparing for action. Already there is noticeable a general awakening of the public conscience.

We will solve every perplexing problem, overcome every threatening danger, remove every blighting evil; and in that great work the teacher will perform not the least important part.

TOPIC: SCHOOL HYGIENE

*I. THE NECESSITY FOR DEPARTMENTS OF HEALTH
WITHIN BOARDS OF EDUCATION*

WM. H. MAXWELL, SUPERINTENDENT OF SCHOOLS, NEW YORK CITY, N. Y.

I am asked to answer the question: Should medical inspection of children in public schools be conducted under the direction of the school authorities, or under the direction of a co-ordinate branch of the city government—the Board or Department of Health.

I answer unhesitatingly that the medical inspection of school children, as far as it refers to preventing the spread of contagious disease, is properly the duty of the Board of Health because that department alone is clothed with the power of quarantine. So far, however, as medical inspection deals with physical defects and with building up the constitution of children thru their school-work, it will be most efficiently conducted under the supervision of the school authorities.

In giving reasons for this conclusion, I shall inquire, first, what is the field of work for the physician in the school, outside of the detection of contagious disease; and I shall, in the second place, show that from its very nature, it is best performed under the direction of the school authorities.

1. The conditions of modern city life tend to produce or to intensify physical defects in children. The most conspicuous of these conditions are: Lack of exercise, city children seldom having to walk more than two or three blocks to school, and having little work to perform about the home that would develop the muscles and breathing capacity; crowding in poorly lighted and poorly ventilated apartments, which results in various forms of tuberculosis; lack of space for free play; lack of interesting occupation outside of school hours; excessive noise; lack of sufficient sleep, owing to noise and excitement; insufficient or unwise feeding, tea or coffee and bread being the principal articles of diet in the tenement house; uncleanly habits of person, owing to lack of bathing facilities and to lack of knowledge of the need of soap and water. These conditions tend to produce various forms of nervousness, lowered vitality, defective eyesight, defective teeth, and growths in the nose and throat which restrict respiration and drive the child into reckless mischief and defiance of authority. Hygienic conditions in the school, tho better even in the oldest and poorest school building than in the average tenement, have not tended to alleviate troubles generated in the home and in the street, and in some cases even tend to augment them. The crowding in the tenements has led to the erection of enormous school buildings, which are also crowded, for in no other way can children in the congested neighborhoods receive the benefits of education. Sitting several hours a day at a desk increases such diseases as curvature of the spine, and often produces faults of posture which the physical exercises of the classroom and the gymnasium barely avail to counteract. Defects in eyesight are certainly aggravated by the work of the classroom. In short, tho the school is doing what it may with its present resources—by physical training, by games, by athletic sports, by the maintenance of recreation centers—to neutralize the evil effects of urban life upon children; yet these resources are inadequate because they do little or nothing for those children who are suffering from physical defect. They are admirable and necessary for those children who are naturally healthy and vigorous; but what a farce it is to urge the boy who is weak thru the insufficiency or unfitness of his food or who cannot breathe properly because of adenoid growths in his throat, to participate in relay racing or cross-country running! The conclusion is inevitable: the urban school can do but little for the child suffering from physical defect or weakness engendered by modern urban life until the defects are removed or the weakness strengthened; therefore its resources should be augmented by the establishment of a Department of Hygiene vested with power to discover physical defects in children and to compel parents and guardians to apply the proper remedies when they will not do it of their own accord.

2. That medical and surgical knowledge has reached a perfection which enables its practitioners to co-operate in the education of children is a fact not recognized by the general public but nevertheless true. It is only within the past generation that medical science discovered the laws according to which babies should be fed and tended. It is only during the past generation that preventive medicine, formerly employed only against smallpox, typhus, and plague, has been extended to combat malaria, yellow fever, and tuberculosis. In olden times the province of the physician was generally regarded as confined to the treatment of the sick; today that province has been extended to include those measures that are necessary to prevent those who are well from becoming sick and to remove the seeds of disease. Some of the problems which the physician equipped with the resources of modern science may help us to solve are the following:

a) *Problems of posture.*—The physician is needed in the school to advise as to the best methods of counteracting bad habits of posture that lead to malpositions of the spine with resulting interference with respiration, circulation, and digestion—results which, under existing conditions, seem inseparable from long hours of sitting.

b) *Problems of vision.*—There are thousands of children in the school who cannot profit by the school-work because of defective eyesight. Reports from the Department of Health seem to indicate that 6 or 7 per cent. of the children who enter the lowest grade suffer from some kind of defective vision. As children progress from grade to grade the proportion of them who are so affected constantly increases until, in the highest grade, it is estimated that not less than 40 per cent. are afflicted with some form of eye trouble.

c) *Problems of nose and throat.*—These troubles are constantly on the increase. Only in a small percentage of cases are they, tho easily corrected, removed. Scarcely any progress has been made in the discovery of the cause of these troubles, and yet they do more than any other physical defect, except deficient eyesight, to cause trouble in school. There are nose and throat specialists in abundance, but few who have made an exhaustive study of the specific conditions found in the schoolroom and yard.

d) *Problems of nutrition and growth.*—There is a well-founded belief, after all due allowance has been made for sentimental exaggeration, that there are many children who fail to profit, either in whole or in part, by their education, because their bodies are not nourished. Even if it were now possible to provide at cost price a wholesome mid-day meal in all city schools, the problem of instructing parents in the feeding of children would still remain. This can be accomplished only thru a well-organized corps of medical experts and nurses.

3. A Department of Hygiene is necessary because teachers stand in constant need of the skilled physician's advice in the treatment and training of children. Particularly is this so in the case of nervous disturbances to which, as we all know, city children, because of the conditions of urban life, are peculiarly liable. The teacher should not be required to shoulder all of this responsibility. He is entitled to expert advice that will guide him in managing the child's school-work so that it shall not augment, if it does not remove, the physical trouble. Again, the whole question of school work, as it stands related to fatigue, calls for the counsel of the medical expert. Some children are so constituted as to stand without injury five hours of work in school and one or two hours out of school. For other children this amount of work is

ruinous. Questions of this kind—questions which involve more of medical skill than of pedagogical knowledge—can be conclusively settled only by a trained medical expert after consultation with a skilled and experienced teacher. They certainly ought not to be, indeed they cannot be, settled by the teacher alone. In the families of the rich these questions are settled—at least sometimes—by the family physician; but *we* have to deal with tens of thousands of families that have no family physician and little sense of the physical dangers of childhood or the duties of parents. In order to enable the child of the poor man and the child of the neglectful rich man to have equal opportunities, as far as education goes, with the child of the duty-understanding, and the duty-obeying, well-to-do parent, a Board of Education should provide that expert medical advice regarding the school-work of children of which every teacher stands in need.

4. The influence of such a department is needed, in addition to the influence of the teachers, to give to our enormous alien population new ideals and new habits in the rearing of children and in establishing among them American standards of living. It is generally admitted that the public school is the most potent influence we possess in converting the vast hordes of foreigners who annually come to our shores into self-respecting, self-supporting American citizens. I would be the last to minimize or disparage this influence. It has wrought wonders in training children to intelligence, efficiency, and civic duty. Even in this very matter of establishing higher standards of living, the modern school, with its example of good housekeeping, with its orderly arrangement, with its lessons in sewing and cooking for girls, and in manual training for boys, to say nothing of the other subjects in the curriculum, has accomplished very much. And yet it will not be able to do its perfect work until we have a Department of Hygiene, equipped to detect the evidences of disease and of improper living, and clothed with the necessary power to enforce its counsel among ignorant or negligent parents. If half a dozen parents in as many different parts of a city were fined or imprisoned for failure, after repeated warnings, to provide their children with necessary eye-glasses or to have adenoid growths removed, the example thus set would do more lasting good than any amount of preaching on the subject. Every time a foreign parent is persuaded or compelled to do something for the improvement of his child's health, he moves a step nearer the American standard of living.

5. The establishment of a Department of Hygiene, under the direction of a Board of Education, would be both a direct and an indirect saving in financial expenditure.

Recent investigations have shown that there are in all city schools a large proportion of over-age or retarded pupils. Deferring entrance to school until the age of eight or nine, too frequent transfers from school to school, and remediable physical defects are doubtless responsible for a considerable part of this retardation; but the most potent cause, I feel reasonably certain, will, in the last analysis, be found no other than low vitality, chiefly physical, which

prevents the student from taking proper advantage of the opportunities of the school. How to strengthen these weak natures, how to stimulate this sluggish flow of life, is the most difficult problem today in the schools. If it is ever solved, it will be solved by the teacher, the physician, and the school nurse, working in cordial co-operation. If, thru such efforts, all or nearly all children could advance thru the grades at the normal rate of progress, the saving would be enormous every year—certainly a sufficient amount to maintain all necessary trade schools.

Such being the work physicians may do in school, I submit that they should do it, indeed that *they can only* do it *effectively* under the direction of school authorities.

In the first place, we should wrong ourselves if we did not raise our voices against another city department obtaining jurisdiction over work that is purely educational in character.

In the second place, dual authority and responsibility in a school—that of the school authorities and that of the health authorities—always have resulted and always will result in confusion and inefficiency.

In the third place, the accomplishment of the results desired requires experts; and experts in school-work are not developed by health authorities.

Preventive medicine, as applied to the conditions of school life, is still in its infancy. It cannot develop into a science until there is a considerable number of physicians who will devote their time and energy to making themselves specialists in this particular branch of therapeutics. The young inexperienced physicians who are sent to our schools by boards of health are not specialists along this or any other line; and, being frequently changed, will never have an opportunity of becoming specialists. It is only when physicians are held to a strict responsibility by the school authorities; it is only when the results of their work are measured by results in the classroom; it is only when they are retained for years in this service, that we may expect to develop experts in school hygiene.

If anyone doubts the statement I am making—that the young men just out of college who are sent by boards of health into our schools to examine children are not experts in school therapeutics—he has only to read the analysis of the work performed by the physicians of the New York Board of Health which was recently made by the Bureau of Municipal Research. One statement will suffice. Examining the same children one inspector found that thirteen children were suffering from pulmonary disease, another inspector found only two; one inspector found twenty-eight children suffering from malnutrition, another only ten; one inspector found seventy-two children suffering from defective vision, another one hundred and one. Two inspectors examining different children in the same school, where conditions were as nearly as possible uniform, reported results ranging as greatly as between 32 per cent. and 92 per cent. Examining in different schools one physician reported 100 per cent. defects; another 18 per cent. The disagreement among doctors is

proverbial; but such disagreements as these are possible only when the work is done carelessly and without a sense of responsibility to constituted authority. Is it any wonder that the Bureau of Municipal Research reached the conclusion that "physical examinations as conducted have been far from uniform and that some plan must be devised for standardizing them"?

The obvious reasons for this deplorable waste and insufficiency are that the physicians were young and inexperienced, that they never had the opportunity of becoming experts in their work, and that the Board of Health had not the inclination or the ability, while the Board of Education had not the authority, to hold them to a strict accountability for their work and its results.

But the crowning reason for placing this work under the supervision of the Board of Education is that the work of mind-training is so interwoven with the work of physical training that the work of the teacher and the work of the physician cannot be disassociated without loss to both.

II. *THE PLAYGROUND AS A FACTOR IN SCHOOL HYGIENE*

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PITTSBURGH, PA.

Scarcely twelve months ago, the whole country was shocked at a disaster to school children, so horrible in its details that men in distant cities wept in street cars as they read the account in their morning papers. Everywhere schoolhouses were immediately inspected and hundreds of thousands of dollars were expended in alterations and fire escapes. Since then, in the city of that sad disaster, and in every city of equal size, many times that number of children have perished, and scarcely a comment has been raised. It would take four disasters like that at Cleveland every school day in the year to keep pace with the march of death among the school children of our land.

During the coming year more than one hundred thousand school children will end their young lives, the bloom of babyhood scarcely yet faded from their cheeks, and tens of thousands of Rachels will mourn for their little ones and not be comforted.

During the next ten years millions more will lay the foundations of weak constitutions to succumb to some great white, black, red, or yellow plague before life's meridian has been reached.

To those who rejoice in the living, Dr. Hutchinson's cheering declaration that "it isn't so very dangerous to be alive" will bring its reassurance, but to those who mourn for the dead, it will lend an added pathos. The unnecessary loss is the hardest to bear. And this loss, inconceivably great as it is, is largely within our power to prevent. For not only is it not so very dangerous for a child from five to fifteen to be alive, it is the natural and easy thing for him to remain alive, if he has a fair chance.

These are the years when the life forces are at the flood. It is as if Nature at this age endeavored to repeat in each young life the observance of the Pass-

over and had sprinkled upon the gateposts of these ten hopeful years the sign of immunity that the Angel of Death, seeing, might pass by. We often congratulate ourselves that the years that constitute the school age for the great majority of children are the years when the death-rate is lowest. And yet the aggregate preventable loss thru death, in these most favored years, is enormous, and the sad processions that follow abandoned hopes to the grave outnumber in the aggregate the armies of the world.

But there is another and far more serious loss than this. It is not the death-rate during the school age, however great or small, that is the significant thing for us. The significant thing is whether in these years of Nature's smiles strength or weakness is being laid by for future years. We are learning more and more clearly every year that our skulking foe, the microbe, of whatever tribe, strikes when a man is down. Patiently he bides his time, gathering his forces in secret until the time to strike. No better illustration could be given than that of tuberculosis. According to Newsholme, only three children in 10,000, from five to fifteen years of age, die of consumption, but from fifteen to forty-five, more than one person in four dies of this dread disease. Speaking along this line, Dr. Tylor says:

It would seem highly probably that the increased death-rate of girls at eighteen and thereabouts, from consumption and other diseases of relatively slow action, is the culmination of an attack begun at thirteen and fourteen. If we are to diminish this death-rate, we must fortify the girl against the period of greatest weakness when she is most likely to receive hospitably the germs of fatal diseases. To accomplish this we must not wait until the twelfth or thirteenth year but meet the difficulty in childhood.

Huber, also, in his work on *Consumption* says:

There is the long period of latency in which, if the child be well natured, and if he live hygienically, he will be likely to overcome such tendency to disease as he may have begun life with.

When at some future time posterity looks back upon the conditions that prevail in our day, it will behold no darker picture, no more disgraceful thing than our weak surrender of our children to sickness and death. What excuse can then be offered for the fact that, even in this land, more than one-half of all the children born into the world die before they have reached man's estate; that 70 per cent. of school children suffer some physical handicap, more or less serious, at the very threshold of life's opportunities; that our schools not only do not fortify the children against known enemies, but actually betray them, in their innocence, to their deadly foes?

To the American School Hygiene Association belongs the great credit of an organized effort to free us from this national error, but may I present the humble claim that the advocates of the playground offer the most promising single means for its accomplishment.

From amoeba to man the essential conditions of life and health have been few and plain. Thru all the ages of that slow ascent, but with varying

emphasis, these have been food, air, sunshine, exercise. Upon the supply of these, in proper kind and amount, depends the health of amoeba, worm, fish, bird, dog, or man.

Omitting the first of these for obvious reasons, let us consider the importance of each of the others in school hygiene and the office of the playground in supplying them.

Air.—The playground is the only place where a school child gets air in the proper amount and kind, the only place where he obtains full and complete aeration of the blood. A despicable fraction of schoolrooms have standard ventilating apparatus, and the rooms that have do not always adequately benefit thereby. I have personally tested a score of schoolrooms almost under the shadow of the capitol of a state that has the best of existing laws, and found the supply of air to equal the standard in only two of the rooms and in some it fell to less than one-fourth of that amount.

But could ventilation be perfect in a schoolroom, there could not be the same aeration of the blood of a seated, studying child as of a child on the playground. There must be the exhilaration of joyous exercise, the quickened heart beat, the deepened breathing, the full chest of sustained effort that drives the air to the very apex of the lungs, to meet the needs of the growing child. The schoolroom may be made less and less objectionable, but so long as it remains a schoolroom it cannot escape the imperative need of the playground as a factor in school hygiene.

As you well know, it is not only the lack of oxygen but also the presence of organic poison in exhaled air that makes ventilation so important. It is a fact noted by biologists that all animal life excretes a poison destructive to itself. This is as true of the single-celled animal as of higher life. Bacteria may thrive luxuriantly for a time in culture media, but if they are not transferred to fresh culture media, they pass into a period of lessened activity and finally die poisoned by their own excretions. A child's body is an accumulation of a vast number of cells each of which, by its very functional activity, likewise excretes products so poisonous to itself and the system generally that accumulation beyond a certain limit results in death.

Nature has gradually placed more and more emphasis upon this cleansing process. If you trace the evolution of the vital organs from the single cell to man, you will find a general increase in the number of the excretory organs. The newer organs have developed as supplementary to the older, and altogether they form a co-operative system, a weakness in any part of which places an added burden on the rest. Nature here gives us no uncertain hint as to the needs of the child. Playground activities, as those in the school cannot do, not only purify the blood thru the increased activity of the lungs in the pure air of out of doors, but stimulate the healthful activity of all the excretory organs, preserving a well-balanced system.

Sunshine.—"Where the sun does not go, the doctor does" is an Italian proverb, quoted by Kotelmann. Try as we may, we cannot get the sun

sufficiently into all our schoolrooms, and if we could we would shut it out again as soon as we let the children in to study, because we say it hurts their eyes.

Where, then, shall the children bathe in the sunshine as they need, but on the playground? We do well to debar contagious diseases from the schools, but let fly over our children's clothing myriads of bacilli and the most malignant perish in a short time in the joy and the sunshine of the playground. Few disease germs have been discovered that can survive even for one hour the streaming sun on the face of a laughing child.

You remember the experiment with the tadpoles. They were placed away from the sunlight for thirty days, and during all that time ceased to grow. Returned to the sunlight, they resumed their growth, and advanced farther in one day than in all the previous thirty. Placed once more away from the sunlight, and then returned to normal conditions, they grew to stunted frog-hood. Just such an experiment society tried with babies in the dark rooms of New York's tenements, and every baby, almost without exception, born and kept in those rooms died. But when Jacob Riis smashed the walls and the light of heaven streamed in, the babies began to live.

In our cities and larger towns everywhere, we are still repeating, in a measure, the same experiment, and place our children like the unfortunate tadpoles in darkened homes, narrow, shaded, and smoke-enveloped alleys, and schoolrooms into which the sun seldom or never enters, nay, often in schoolrooms lit even in the middle of the day by natural or artificial gas. Bring to these little ones medical inspection, examine their eyes, remove their adenoids, protect them from measles, and all the rest, but shall we not add a playground where, for a part of the day, they may bathe in the sun as God Almighty has said they must, if they live?

Exercise.—I have just examined the indexes of two famous books on school hygiene, and in them was no such word as exercise. But exercise is life, and the absence of it is the sure sign of death. By exercise came evolution. Exercise shaped the body, determined the vital organs, built the brain. By exercise the child takes possession of his inheritance from the race. To him it is the past, the present, and the promise of the future.

But that exercise no man can dictate, no teacher devise, no scholar fully define. It comes forth unbidden from the child, declares his nature, discovers him to himself, defines his relation to his mates, shows him the world. It is his play, it is himself. Can the school alone do this, be this? In the long process in which exercise shaped the body and built the brain there was determined for all time the path by which the child must come into his own. In that shortened process we call childhood, every faculty, every power, every organ that fails to receive its due exercise shrivels, and health by so much suffers and by so much the man becomes less a man. It would require a book to speak in full of the exercises of the playground that meet the needs of health, physical, mental, moral, aesthetic, social health, for all these are elements in the health of the body, as we all have come to understand. But

in many respects, in the very nature of the case, these exercises are impossible in the school, they are possible only on the playground.

Once upon a time the citizens of a certain city really believed what I have just been trying to say, and when the question arose as to whether they should build a great public school or open a playground it was decided to open a playground. Now it came to pass, in the course of years, that the citizens of that city advanced so far beyond the rest of the human race, that, in all the centuries since, the nations that have gone on building schools and neglecting to open playgrounds have not been able to catch up with them even to this day.

This is fact, not fancy. At seven years of age the Athenian lad entered the palaestra, which was essentially a playground. All the first and better half of the day was spent in gymnastics, dancing, games, and play. In the afternoon there was singing, some writing (the beginners wrote in the sand-box or in sand strewn upon the ground), some reading, all in the open air, and then came a long period of play again. Such was the schooling of the Greek lad up to the age of ten or eleven, and it did not differ essentially up to the age of sixteen except in the severity of the exercises. And yet, the world has not ceased to marvel at the results of the Greek education. It produced the highest type of man, physically and intellectually, that the world has ever seen, which Galton says was as far in advance of the modern Englishman as the modern Englishman is in advance of the native African. In physical beauty, courage and patriotism, in philosophy, literature, architecture, and art, the Greeks have been the unsurpassed models of the ages and are still the inspiration of our schools today. But they placed the emphasis upon hygiene, exercise, games, and play, which we neglect, if not ignore. They cared for the strong, and sometimes left the weak to perish. We care tenderly for the weak and often leave the strong to perish.

This is fact, not fancy. In the state where I had the privilege of acquiring most of my experience in educational work, a child to obtain the best educational advantages must be blind, deaf, feeble-minded, incorrigible, or a truant. Then he is given exercise, playgrounds, gymnasia, baths, fresh air in abundance, gardens, and playshops. The great majority of normal children get along the best they can without them. And now in Pittsburgh they have an open-air school for children with a tendency to tuberculosis. So consumption seems to be another of the list of ills, one of which a child must have in order to enjoy the best educational advantages. I am not disapproving of this care for the weak. I believe in it with all my heart, but this we should have done and not left the other undone. There are thousands and thousands of children in the regular schools of Pittsburgh who have no place to play, no recess, no really fresh air to breathe, little sunshine and less genuine life-giving exercise.

We have reversed the order of importance in education as it was observed by the Greeks. The Greek education was essentially a playground education, and the education most nearly approaching it today is that supplied by the playgrounds of America. To that classic demonstration of the educational

value of the playground has been added in our day an avalanche of testimony from biology, physiology, anthropology, psychology, and sociology. Of the \$10,000,000 playgrounds of Chicago, President Roosevelt says, "They are the greatest civic achievement the world has ever seen."

To sum up:

First, we do not take good care of our children.

Second, we need to improve our care along four lines, namely, better food, better air, more sunshine, better exercise.

Third, in the very nature of the case, the playground alone can adequately supply the last three of these to the child.

Fourth, this is no new experiment. We have the classic playground along with classic literature, architecture, and art.

Finally, just as we have awakened to the fact that the school provides but a small fraction of a child's education, that environment, which includes everything that comes into the child's experience, is teaching him every waking moment of the day (perhaps every sleeping hour of the night, if we agree with Dr. Worcester) so we have come to understand that the activities of the school provide but a small fraction of the exercise necessary for the health of a child in this larger meaning. In the long process of the race have been tried and found good, have been refined and passed on, every organ and instinct with which a normal child is born, and some yet higher function, some yet nobler conduct, shall spring from their roots. Not in the school but on the playground can these deep instincts of workmanship, imitation, rivalry, co-operation find their true and genetic expression, and build more stately mansions in the soul, as the swift seasons roll. These instincts calling from the depths of the child's nature are not voices calling him astray, or to delay his upward progress. They are the voices saying to him and to the race:

Build thee more stately mansions, Oh my soul!
As the swift seasons roll.
Leave thy low-vaulted past
Let each new temple, nobler than the last,
Shut thee from Heaven with a dome more vast,
Till thou at length art free,
Leaving thine outgrown shell by life's unresting sea.

III. THE EVIL INFLUENCES OF SCHOOL CONDITIONS UPON THE HEALTH OF SCHOOL CHILDREN

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We are proud of our system of education, and we do well to be. But everything human has imperfections in it, and there are spots even upon the sun. Upon me has been thrust the ungracious function of pointing them out. I yield to no one in my admiration of the results of our magnificent free system of public education from kindergarten to college; from country school to cam-

pus. But I wish to raise the question: How far are these triumphs the results of these methods, and how far are they achieved in spite of them?

I am in no sense a pessimist—I don't believe that our educational system is producing physical degeneration of the race for the simple and sufficient reason that I don't think that the race is deteriorating, but on the contrary, is steadily improving, physically. But I will say that while the school is not breaking down the health of the child, that that is thru no fault of the school, which is doing its best in that direction, but on account of the toughness and irrepressibleness of the young human organism.

The aim and object of the school is of course purely mental—the training of the mind. With this, we, as physicians, have no right to interfere. But when it becomes necessary for the purpose of the child's mental education to take his body into custody and hold it in confinement at hard labor for two-thirds of his working day, then the physician has a right to be heard. To such an extent has this schoolroom sentencing of children to an educational treadmill gone, that it has actually become necessary for us to choose between a child's education and his health. Instead of education being a harmonious scheme for promoting the entire development of the child—body, mind, and morals—it has become a systematic effort to promote his alleged mental development, with a disregard for, and often at the sacrifice of, health and morals. This standard has been set, not by the teacher but by the community.

Our present educational system is an inheritance from bygone ages—a survival of discredited ideals, and represents the crystallization of the conservatism and mental inertia of the last ten generations. We would be ashamed to do business as our fathers and grandfathers did; to fight with their weapons, to work with their tools, to travel, to send messages, to write as they did; and yet, we go back to the old college because our father and grandfather did before us. We worship the sacred trinity of the Three R's; we cherish their ridiculous and antiquated spelling; we study our languages in the fossilized state by certain paleontological rules which we term grammar, naturally choosing for preference, for such purpose, chiefly those that have been dead for centuries.

If you want to see ancestor-worship and the adoration of totems in full swing in the twentieth century, go into a schoolroom. What has this to do with health? Simply that in order to exalt the mind, it has been thought necessary to despise the body, and the basal spirit of our education today has still as profound a contempt for the body and its needs, as that of any flagellant or ascetic. As much as the schoolroom can be got to do is to concede to the body such opportunity as it can get for development in the intervals between the serious work of education. Naturally, the subjects studied upon this principle of education are the needs and activities of the mind exclusively; those of the body being politely ignored, or taught in the most superficial and parlor-like fashion. Great improvement has been made in these respects of late years, and a certain smattering of real facts is taught in many of our schoolrooms, but the modifications have been chiefly in detail, and the under-

lying principle remains unchanged. The child is still practically taught to exalt and worship his mind and to ignore, if not actually despise, his body as something animal and degrading.

While we may bound every country in Europe, and draw its coast line and describe its rivers, we are unable to describe any portion of our anatomy intelligently, except such scraps of it as are left uncovered by the clothing; and even if we could describe it, it would be considered highly improper to do so in public. Ignorance and prudery are the fruitful mother of both disease and indecency. Both are fostered by our present system of education. Dirt, disease, and despising the body always go hand in hand.

The next hygienic defect of our system of education is that it takes little or no account of the inherited powers and growth tendencies of the child, but rides as ruthlessly across them as any Juggernaut. It takes no practical account of the fact that the child's mind tends to grow and develop just as naturally and inevitably as his body does. It will not for a moment believe that the child of the twentieth century, born of literate parents, would learn of his own accord, yes, grow, to read, to write, and to cipher almost as certainly as he learns to walk, to climb, and to swim. Little or no attempt is made to adjust instruction in the acquirement of these powers and accomplishments to the age at which they tend, naturally, to develop. Keep a child healthy and growing and answer his questions, and he'll have little need of formal education.

A certain adult standard of information and accomplishment is set up. Then the child's school life is divided into fourths, and he is required to attain one-fourth of this adult standard at the end of the first quarter, one-half at the end of the second, and three-fourths at the end of the third. It takes the child's measure and proceeds to fill him up at the rate of so many pints, or quarts, per year. The result is that two-thirds of the time and labor expended in our schoolrooms is wasted in endeavoring to teach, at great pains and with the production of much stupidity in both child and teacher, things which he would learn of his own accord from two to four years later, if he was only let alone.

The trouble with our schools is not that they teach the child too much, but that they teach him so little in proportion to the outrageous amount of his time that they waste. Two-thirds of our purely mental drill and disciplinary training in the schoolroom is as ineffective and as irrational as trying to develop a flower by massaging its petals instead of tending its roots.

The next defect of our school system is that it confines the child too exclusively to talking about things, reading about things, and writing about things instead of *doing* things. Considered purely as a system of mental training, few things could be more absurd and ineffectual. We speak frequently of the written word, the printed word, the spoken word as "the tools of the mind." Suppose we were to deal with the tools of the body after the same fashion, say in a class in carpentry. See, children, here is a saw—s-a-w. Let us write it on the blackboard. It is derived from the Latin, *serratus*—notched or toothed; here are the notches. It is, as you see, of an oblong shape and presents an

oval-shaped aperture at the wooden end, into which I can thrust my hand, hence this is known as the handle—h-a-n-d-l-e. Let us write that upon the board. Already familiar to you in the phrase: "Touch not, taste not, handle not the unclean thing."

"Can you give me a sentence in which the word 'saw' occurs?" "See-saw, Marjory Daw!" "Very good!" "Remember that you must distinguish this from the past tense of the verb, 'to see'—frequently, but most incorrectly given as 'seen.' I hope none of you will ever be guilty of this vulgarism." And so on, *ad infinitum*, instead of, "Here's a saw and a hammer and some nails. Get to work and make a box!"

We should develop the tools of our minds, not by reading about them and talking around them and writing all over and around and across them, but by *using* them on something we are interested in and can understand. Our present system of culture is chiefly occupied with teaching children to express their ideas—without giving them any ideas to express. Its primitive prototype was a Pharaoh of Egypt when he demanded bricks without straw. From a physical point of view, lessons and formal instruction in reading, in writing, in spelling, and in arithmetic, are not only unnecessary but absurd. The rational method of teaching them is to put the children at work at something which they are interested in, and can understand; then urge them to talk, write, and figure about it, correct their mistakes and set them a good example. This is Nature's-Royal Road to real learning.

In short, the ideal school of the future should be about one-fourth book work or schoolroom, one-fourth workshop, one-fourth garden and one-fourth play. "But," objects someone, "this would deprive education of all disciplinary value." President Eliot spitted that heresy, and pinned it to the wall for all time, the other day, in the statement: "You cannot train a child for life by teaching to it what it hates." The best preparation for success in life is not to teach a child to work, whether it likes it or not, but to teach it to love its work, to take a joy and a pride in learning and doing. This, the unspoiled young of the human species is ready and eager to do, if he is only given a chance to grow into it naturally. Our present method of forcing things down his throat, months and years in advance of his appetite for them, indeed of his ability to digest them, serves simply to disgust him with the whole process.

It has long been the complaint of practical men that the school did not fit children for life, and practical men were right. The principal aim of the school is yet the production of that ornamental, but rather useless, creature known as a "gentleman and a scholar." The ambition which it drills into its graduates is that they should be superior to others, instead of being of service to the community. The aim is to train professional men and clerks, rather than business men, craftsmen, and scientists. Small wonder that it is so utterly unsuited to the natural requirements of the child and of the age, that from 25 to 40 per cent. of its pupils are from two to three years behind their grades before the twelfth year, and that there is a perfect rush to escape

from its prison walls after the age of twelve—in other words, as soon as the child begins to think for himself.

It is not necessary to choose between culture and efficiency, between mind and body, between intellect and morals. All are part of one great whole, and all interdependent. If our schools will simply push forward to their full legitimate conclusion the magnificent movements which they have already begun in the direction of manual training, gymnasias, trade schools, school gardens and school playgrounds, reducing the hours of confinement in the schoolroom to less than two hours a day and developing the whole child, symmetrically, instead of just the brain bulb at his upper end, the real millennium of health, of happiness, of personal righteousness and civic devotion will come, without our having to go to heaven to get it.

IV. A PLEA FOR THE SYSTEMATIC ANNUAL AND UNIVERSAL EXAMINATION OF SCHOOL CHILDREN'S EYES, NOSES, AND THROATS

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In presenting a paper on the eyes and ears of school children the magnitude of the subject should first be considered in order to emphasize its importance.

There are in the United States about 20,000,000 public-school children or about 20 per cent. of the entire population. These children average 150 days in school each year.

There are nearly 500,000 public-school teachers in this country.

About \$850,000,000 are invested in public schools, and about \$440,000,000 are annually expended for keeping these schools in useful operation.

There are in the United States about 300,000 blind people, supported by the state at an annual expense of about \$15,000,000. Most of these people would not have become blind if their diseases had been detected early in life.

It has been recently ascertained in London that whereas it only costs £4 or £5 per annum to support a normal child, it costs about £23 per annum to support a deaf child.

About 50,000 American children are annually removed from school on account of physical inability to continue at work. A large proportion of these children suffer from some eye or ear defect.

About 8,000,000 school children suffer from some eye defect, and about 8,000,000 from some ear, nose, or throat defect. In other words, about 16,000,000 children, or 80 per cent. of the entire public-school population, suffer from some eye, ear, nose, or throat defect, which more or less retards their school progress, and a vast majority of these diseases could be cured or relieved if detected and placed under proper medical supervision. Dr. F. J. Mann, of Poughkeepsie, inspector of schools, recently found that every truant in that city had some radical defect of the eye, ear, nose, or throat.

If the foregoing statements are true, and I believe they are, then the subject is one of great magnitude and one quite worthy of the careful consideration of sociologists, educators, school and health boards, physicians, parents, and lawmakers. The vast amounts of money invested in school properties and annual budgets cannot be well expended unless the children are in a proper physical condition to receive presented instruction. Unless children receive and absorb presented instruction they do not become properly educated. Unless children are properly educated they do not become useful citizens, and are apt to develop idle and criminal tendencies and become financial and moral charges upon the state. The logical conclusion, therefore, is, if it is deemed advisable materially to mitigate idleness and crime, and to increase the ranks of self-respecting and self-supporting men and women, then educate them, and, if physical defects hamper their educational progress, then eliminate, as far as possible, such physical defects, and allow the children at least the physical possibility of absorbing the beneficial opportunities of our public schools. There is much to be said concerning the specific and intimate connection existing between a child's general health and his studies, but as my portion of this symposium refers only to the eyes and ears of school children, I shall be compelled to limit myself to this phase of the subject, remembering, however, that this topic is by no means restricted in its character for, with the exception of mental capacity, nothing is so essential to the acquirement of an education as good sight and hearing. A child who cannot see well at a distance is debarred from participation in the important blackboard and other distant demonstrations which play such an essential rôle in modern educational methods; a child who cannot study without headache or fatigue soon forms a great distaste for books and acquires habits of idleness, with all its entailed consequences, while a child whose vision is generally impaired by cataracts, corneal scars, intra-ocular diseases, etc., becomes almost a hopeless proposition so far as a decent education is concerned. The difficulty which a deaf child undergoes in the effort to acquire an education must be apparent to everyone, while a child with discharging and foul ears is not only in danger of death, but is an infective menace to the entire school.

Children of this kind, with serious eye, ear, nose, or throat defects, find themselves at great disadvantage in their school. Owing to their physical infirmities they cannot easily take advantage of presented instruction, and, consequently, fall behind their fellow-students, are thought to be stupid, idle, or vicious, are punished for their retarded progress, become discouraged and lose interest in their work, become truants, form bad associations, easily drop into pauperism and crime, and undoubtedly form the major portion of the inmates of reform schools, jails, penitentiaries, and charitable institutions.

It must, therefore, be admitted that education is one of the strongest factors in the lessening of poverty and crime, and that to education we must largely look for the upbuilding and development of strong, resolute manhood and womanhood which must ever be the hope and promise of the nation's succeed-

ing generations. Is it then asking too much of educators and lawmakers to see that the physical condition of children is such as to render easily possible the absorption of the educational offerings of our public schools, for without such physical capacity it must become difficult or impossible to uplift the child, mentally and morally, and to take advantage of the country's immense expenditures in the interest of education and, higher still, to take advantage of the great opportunity extended to our public schools, of turning out each year young men and young women well adapted and equipped for the great battle of life and for the general improvement and betterment of our fatherland and its conditions.

Our public schools are a public trust, not in the offensive sense of the word, but they are a trust confided by the people to certain officers into whose hands are intrusted the welfare of our schools and their pupils. These officers voluntarily assume their duties; they undertake to manage the schools in the best interests of the children, the people, and the nation. They require attendance and establish meeting-places where they stand *in loco parentis* and where the children pass the major portion of their waking hours. They should, then, not be satisfied with the mere extending forth of knowledge to the young and budding mind, but should accompany it with all the solicitude and care extended to fortunate children by loving and watchful parents, for it must be remembered that many children in our public schools are fatherless or motherless or, Heaven knows, might better be, and will receive all the love and kindness they are likely to know behind the portals of our public schools. I should not be misunderstood as criticizing our schools or of accusing its officers of neglect or carelessness, for such, believe me, is not the case; enormous strides have been made along these and all other lines during the last few years, but much remains to be done and it is to be hoped and believed that the same degree of energy and enthusiasm that has already inspired the accomplishment of so much good work in the past will be the means of accomplishing that work in the future, which must be the aim and ambition of all those having the best interests at heart of the children, the schools, and the nation.

The systematic physical examination of pupils by medical school inspectors and the efficient co-operation of school nurses are among the greatest advancements that have ever been made in the direction of improving the physical condition of school children; enormous benefit has resulted therefrom. Their labors, however, can be greatly heightened by delegating to the school teachers themselves the practical examination of the eyes, ears, noses, and throats of the children. Fortunately, this is a field that can be efficiently covered by the teacher, for, while after the examination the teacher will not, and should not even try to make a diagnosis, sufficient data will have been obtained to enable her or him to know that the child has passed either a satisfactory examination, or has some defect which shall be diagnosed and treated by the physician to whom the case becomes ultimately referred. This examination consists in the ascertaining of a few simple facts as follows:

1. Does the pupil habitually suffer from inflamed lids or eyes?
2. Does the pupil fail to read a majority of the letters in the number XX line of the Snellen's test types with either eye?
3. Do the eyes and head habitually grow heavy and painful after study?
4. Does the pupil appear to be "cross-eyed"?
5. Does the pupil complain of earache in either ear?
6. Does pus or a foul odor proceed from either ear?
7. Does the pupil fail to hear an ordinary voice at twenty feet, in a quiet room, with either ear?
8. Is the pupil frequently subject to "colds in the head" and discharges from the nose and throat?
9. Is the pupil an habitual "mouth breather?"

If an affirmative answer is found to any of these questions the pupil should be given a printed card of warning to be handed to the parent, which should read as follows:

CARD OF WARNING TO PARENTS

After due consideration it is believed that your child has some eye, ear, nose, or throat disease for which your family physician or some specialist should be at once consulted. It is earnestly requested that this matter be not neglected.

Respectfully,

It will be observed that these cards are not obligatory in their character and that they leave the choice of a physician with the parent. If the matter is not attended to the teacher or the school nurse should take the matter persistently in hand and endeavor to persuade compliance with the plan. The examinations should be made early in the school year, say, in September, in order to bring the idea to completion and watch the results before the end of the school year. To this end it is urged that a certain early date be set aside each year for these examinations, and that nothing shall be allowed to interfere with their performance. It is recommended that each teacher examine the pupils in her own room, not only because she is familiar with the children and their complaints, but because it subdivides the work, so that it does not become a strain upon any one person; the results can be handed to the principal who should retain them for future reference. I advise that a certain early date in the fall be set aside for these examinations, and inasmuch as a schoolroom rarely contains more than forty pupils, and that each examination can be easily made in five minutes, an entire room can be examined in a few hours. In this way an entire city, no matter how large, can be easily finished in less than a day's time, and the benefits which must follow are bound to be enormous. The expense is slight, as all that is necessary is the Snellen's test-types with teachers' instructions attached, together with the warning cards to parents and very simple record blanks. A city like Chicago, for instance, can be annually tested at an expense which should not exceed \$500 per annum, a truly insignificant amount, when one considers the great benefit which must inevitably follow. Teachers do not need to feel their incapacity to make these tests, for the questions are of the simplest character, and yet, when analyzed, will be found to be so comprehensive in character as to detect at least 90 per cent. of serious eye, ear, nose, or throat defects. Neither is it a tax on a teacher's time

or patience, for the tests are perfectly easy to make, can be done in a few hours, and the great benefit which will follow, in transforming apparently stupid children, who cannot see or hear well, into ordinarily bright children, will amply repay the teacher for what little work she has done and, by such transformations, will inevitably and greatly lighten her future labors. This plan, which I proposed years ago, is now in quite general use thruout the United States, and has been indorsed by the American Medical Association, by most of the State Medical Societies, Boards of Health and Education, and is a law in Vermont, Connecticut, and Massachusetts. I here give the Vermont law, which is the best one that has yet been passed:

Section 1. The State Board of Health and the Superintendent of Education shall prepare or cause to be prepared suitable test cards, blanks, record books, and other needful appliances to be used in testing the sight and hearing of pupils in public schools, and necessary instructions for their use; and the Superintendent of Education shall furnish the same free of expense to every school in the state. The superintendent, principal, or teacher in every school during the month of September in each year shall test the sight and hearing of all pupils under his charge, and keep a record of such examinations according to the instructions furnished, and shall notify in writing the parent or guardian of every pupil who shall be found to have any defect of vision or hearing, or diseases of eyes or ears, with a brief statement of such defect or disease, and shall make a written report of all such examinations to the Superintendent of Education as he may require.

Section 2. The State Auditor is hereby directed to draw his order on the State Treasurer for such sums and at such times as the Superintendent of Education, with the approval of the State Board of Health, may require to carry out the provisions of this act. The total expense under this act shall not exceed Six Hundred (\$600) Dollars in any biennial term ending June 30.

Section 3. This act shall take effect July 1, 1905.

A similar law will probably be passed this winter in Illinois, Indiana, Ohio, Colorado, North Dakota, California, and other states. It *should* become a law in every state in the Union, for these examinations should be compulsory in character and every school child should participate in its benefits. (May I beg for the assistance of this society and the profession of this state, in securing the passage of this law at Springfield this winter? Senator Charles Billings has the matter in charge.)

In conclusion, and bearing directly upon the subject, not only of a child's general health, but also of his ocular condition, I desire to protest against the too frequent intellectual forcing of children, to satisfy the ambition of the child himself, his parent, or his teacher. This process becomes particularly objectionable when it occurs as it frequently does during the period of adolescence, when the nervous system of the child is often taxed to its utmost, and when his studies and indoor confinement should be reduced to a minimum. It is at this time that we frequently see not only generally broken-down children, but also children whose eyes are often in an extremely troublesome and sometimes dangerous condition, and it is at this time that extra care and solicitude must be maintained that the seeds of general and ocular invalidism be not planted.

DISCUSSION

HERBERT DANA SCHENCK, Consulting Ophthalmologist to the State Department of Health, Brooklyn, N. Y.—No systematic examination of the vision or hearing of the school children of the state of New York has been undertaken in spite of the fact that it is more than a century since effects of school life upon children's eyes were pointed out by Beers. In 1867 Cohn made an extensive study of the effects of school life, particularly upon the sight, and since then an increasing number of physicians have reported upon the defects of sight, hearing, and obstructed nasal respiration upon school work, Dr. Allport, of Chicago, having done a large work along this line.

The past ten years has witnessed the institution of these examinations in the large cities of the state, beginning with New York City in 1897, followed by others of the first and second class. No systematic effort, however, for examinations, and no effort at all for an annual record of the condition of the sight, hearing and nasal operations has been made by even the most progressive cities. Almost no cities of the third class and, with one or two exceptions, none of the villages of the state have made any examinations at all of the sight or hearing.

The New York State Department of Health took up the consideration of this subject soon after the present commissioner, Eugene H. Porter, A.M., M.D., was appointed four years ago, and, after a careful survey of the field, determined to make an effort to have a test made by the teachers. At a conference of the health officers in the fall of 1906 the matter was presented, and, after consideration by the conference, enthusiastically adopted.

As the health officers of the state were unanimous for having it made uniform throughout the state, a plan, essentially that in vogue for ten years in Connecticut, for four years in Vermont, and for the last two years in Massachusetts, where the examinations are compulsory, was adopted.

The reasons for having the examination made by the teachers were:

First, for reasons of economy. It does not cost the school district one cent, as the state furnishes the cards, blanks, and directions for making the examinations.

Second, it is prompt and causes little disturbance of the school routine, as one day, or, at the most, one and one-half days will suffice for the teachers to make the examination in their own rooms. It is the only plan thus far suggested that combines promptness with completeness.

Third, the method is accurate enough to give parents notice that their children have defects that interfere with their school work, and to enable them to seek competent professional advice thru their family physician. Parents should shoulder the responsibility of correcting these defects in the physical equipment of their children. In every village there is enough Christian charity for the well-to-do to help the less fortunate when necessary.

Fourth, in the large villages and smaller cities competent inspectors to make this examination are few, and in the smaller villages and country districts there are none. In the former it has been found that an inspector hardly finishes the work during the school year. The children, too, are less liable to become nervous and make blunders when the examination is made by their own teacher rather than a stranger.

Because we had no compulsory law and lacked the moral support and active co-operation of the State Department of Education, it was determined to confine our efforts the first year to the incorporated villages.

The test cards, directions, proper blanks for reports, etc., were sent out in October, 1907, for the examination of the children in the 446 incorporated villages of the state. Of these 425, or over 95 per cent., made the tests. The correspondence necessary to have them made in many villages was conducted almost wholly with the school principals. Many of them thought the examination unnecessary; some that it was imprac-

tical; others that they could not spare the time; and still others that it was merely a whim of some reformer. It was a curious fact that in quite a number of villages the trustees and school boards were in favor of the examination but had not sufficient force or energy to compel their teachers or principals to make it. Several such wrote that they had directed that the examinations be made, and were surprised that they had not been, but no reports were ever received.

One of the criticisms of the plan was that the teachers were not competent to make the test, none of the critics having investigated the experience of the states where these examinations had been held successfully for several years.

The number of pupils examined in the 425 villages was 105,767. Of these, 100,722 had only their vision tested; 5,045, being under seven years of age, had their hearing tested, and the condition of their noses and throats recorded. This part of the examination was very defective—only 184 villages reported an examination of those under seven years of age.

The number of children examined varied greatly in its relation to the population of the village. In the smaller towns it went to almost 50 per cent. and in the majority ran from 16 per cent. to 25 per cent. In the larger villages, that is, those having a population exceeding 2,000, the proportion varied between 7 per cent. and 12 per cent. The tests were very much better made, reports better prepared and more promptly returned in the smaller than in the larger villages where the superintendent or supervising principal was opposed to it or took no pains to see that it was carefully done.

About 38 per cent. of the pupils whose vision was tested were reported as defective. This was probably a larger proportion than the facts would justify, due to the inexperience of the teachers, the nervousness of the children, or possibly to improper lighting of the cards because of not following carefully the directions sent out by the department.

There were 10,332 reported with defective hearing, a little over 9 per cent. This is probably somewhat below the percentage usually found, due to the inexperience of the teachers in not having any personal instruction in making the tests. There were 10,232 reported to be subject to earache or having a discharge from one or both ears. Most of these were found in higher grades, showing the defects of the examination and that the information was gotten by the teachers from a subjective instead of an objective examination.

The teachers reported those suffering from "frequent colds in the heads" or those who were "mouth breathers" as about 38 per cent. of those examined, which was excessive because, as noted above, the teachers got their information apparently from questioning the children and not from observation.

From 371 villages and towns 22,548 reports were sent to the parents; 55 villages sent none so far as their reports indicated. In some of the villages undoubtedly a large number of reports in excess of those required were sent the parents, but it is better to err on this side rather than that the parents of any child with a defect of the eyes, ears, or nasal apparatus should not be notified.

In spite of its defects, which were not large considering the newness of the tests and the want of proper personal instruction as to how to make them, the intent of the examination was fairly well met.

The examinations will be more carefully made as soon as the public can be brought to feel the necessity for them, and the teachers have instruction given them in the teachers' institutes, in the normal schools, and in the training classes. When the teachers are properly equipped to make this examination the public will be much more rapidly convinced that the tests only mean to show wherein lie some of the physical defects which lessen the capacity of their children for work. A law making it compulsory to have them annually made, as in Connecticut, Vermont, and Massachusetts, will undoubtedly hasten the time when school authorities, principals, teachers, and parents would take up the plan seriously as a part of the general school curriculum and systematically and carefully carry it out.

The New York State Department sent out blanks nine years ago inviting the schools to make this test, but only received a few reports. Our examination in 1907-08 would have been passed over in the same way had we not followed up the first circulars with additional letters and pressing circulars asking that the tests be made. Some were not made until late in the spring. When school principals generally appreciate the necessity of these tests, the public will speedily conclude that they meet a real defect in the present-day education, and the opposition of those who are uninformed or opposed to any advances or changes of educational methods will be overcome.

TOPIC: INDUSTRIAL EDUCATION

I. THE DIGNITY OF VOCATION AS A FUNDAMENTAL IDEA IN INDUSTRIAL EDUCATION

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The concrete purpose of the movement for industrial education, as I understand it, is to secure an extension of our scheme of public education, so that it shall include that form of schooling for our youth which will fit them for the pursuit of those occupations of life which are connected with the industries. It is a phase of vocational education. Consequently the principles which should be applied to the training of youth for the callings of life generally must, in the main, apply to the development of industrial courses and schools. Doubtless we have not yet fully worked out these principles of vocational education. We are confronted by many serious questions.

Fundamentally, in the schooling of youth, what relation shall we establish between the school and life? Shall the school prepare for life or for only a part of it? To illustrate: Every man has to work to earn a living. His leisure hours are few and their occupations are subsidiary. His thought and energy are absorbed by his vocation. Now shall the schools emphasize his vocation or his leisure? Again: All true education idealizes the human spirit, and consequently places the development of the man above the training of the worker. But to what degree can we separate the man from his work?

The last question raises several others: If we seek to school the worker, shall we train first the man, on the principle that by properly training a man we best train a worker? Or shall we follow the training of the man by a special training of the worker? Or shall we train the worker primarily, assuming that an efficient workman will be an efficient man and member of society? Or can we show that one's work and one's personal growth and social usefulness are all in some way so intimately related that we can best develop a man thru his work, and consequently can train man and worker together?

I am not going to try to answer these fundamental questions specifically. But this paper is written under the conviction that preparation for vocation properly followed does arm the man; that it does educate the individual; that it does enlarge the spirit. One reason for this conviction is its necessity. If

a preparation for vocation is not educational, or if vocation does not develop men, then the vast majority of men can never be educated, because the vast majority of men must begin work fairly early in life, and must toil all their lives. But if the training for vocation is actually to have this large educational value, it implies that vocation itself is to be a large part of life—intrinsically and inherently, and not merely because of the hardships of a changing industrial order, or because of any other accidental causes. Hence it is vital that we shall first find the place of vocation in the normal life of the average man, before we can properly develop the training for vocation, or appreciate the definite educational value of the vocational course of study. We must recognize at the outset the genuine dignity of any legitimate vocation, and the educational value, the cultural value if you please, of an adequate preparation for the adequate practice of a legitimate vocation.

Let us then try to answer briefly such further questions as these: What does vocation mean to the average man? What part does it play in his life? What does it signify as a factor of personal development and of social duty?

I. *Vocation is the only means of livelihood for most men.*—This is not a minor fact, it is a prime fact. Labor is necessary for individual sustenance. It is also a fundamental individual obligation. It is absolutely requisite in a strong social organization. Men must work. Each man must work. But each man ought to work at the thing which he can best do, and he ought to work at his best at the thing which he can best do. Vocation as a means of livelihood is not a thing to be abhorred. It is not a thing to be despised. It is a part of a normal man's life. In fact, it is the larger part of a man's life. Moreover, we must cease to discriminate between the dignity of various vocations as a means of livelihood. It is mischievous to permit the growth of sentiments among youth that seem to dignify certain vocations and to place others under the ban. It is wrong morally; it is harmful socially; it is disastrous politically. If democracy means anything, it means the dignity of the work of the man who works for a livelihood, provided what he does is serviceable and is well done.

II. *It follows clearly that, as vocation is essential to livelihood, it is therefore essential to family life.*—But more than that, the type and success and quality of a man's vocation determine to a very great degree the quality and success and type of his family life. The man inevitably brings to his headship of a family the results in character, in efficiency, in outlook, that are produced by his daily toil. The home and the work react each upon the other; practically the work, or the vocation, is the more active partner.

III. *Vocation is the chief means of social service for most people.*—Doubtless the majority of workers toil for the definite financial reward that comes to them. At the same time, in our complex scheme of industry, with its increasingly minute divisions of labor, a man's vocation is his method of helping to supply human wants, of rendering some service to his fellow-men. It is a beautiful ideal to hold before us that sometime men will enter upon their toil

wholly in the spirit of service. Nothing would more quickly revolutionize industrial society than for men to follow their vocations primarily as a means of service, and secondarily as a means of livelihood or reward. Probably any steps which may be taken toward the realization of any such distant goal must wait on the development of a new idea of the dignity of a man's work in life, as a means of expressing a spirit of social service. Indeed, I believe that this new view of vocation will be achieved almost wholly thru the schools, by adequately preparing youth for the proper vocational experience.

IV *For most men vocation is the chief means of culture.*—We emphasize, and rightly enough, the need of training *men*, of giving youth a “liberal” education; we seek to determine the “cultural value” of certain subjects. But when we consider the actual situation that confronts the great majority of men, even of those trained in the schools, we must admit that vocation is for this great majority the chief element in their mental and moral growth. The character and quality of vocation influence a man's life by determining to a great degree his social and moral environment for the larger part of his waking hours; by fixing to a large extent his point of view as to his individual, social, and political interests and duties; by influencing powerfully his intellectual tastes and capacities; by limiting to very rigid bounds the extent of his leisure, and in some measure governing the use of that leisure. Finally, vocation is for most men the chief means of self-expression for their ideas and for their ideals.

We must consider the duties of citizenship, the avocations of men, what one ought to do with his leisure, the use of libraries, and the development of taste for proper reading; but the practical fact is that the vast majority of even intelligent men find themselves hedged in by the limitations of their vocation. They also find their chief outlet for spiritual and intellectual power thru their vocation.

This brief statement of the place of vocation in life shows that the facts of life dignify vocation, and inevitably suggests the dignity of an adequate preparation for vocation, partly that men may be properly trained for their vocation, and partly that by means of proper training, vocation may still further be dignified and enlarged, not merely as a means of productive efficiency, but as a means of personal growth and social service. Too commonly we think of the added practical efficiency of the worker, and of the desirability of manual skill in our economic life, as the chief arguments for industrial education. All this is good, but it is not adequate. Vocational education—industrial, commercial, or professorial—is adequate only when it shows the personal and social relationships of vocation, when it makes vocation the core of sound personal growth and proper social service. Adequate schooling for vocation will broaden and dignify vocation as well as give industrial efficiency. We cannot afford to magnify industrial efficiency at the expense of personal growth or of social service; nothing will do more to idealize the vocation than a proper course of training for vocation.

I have said that we must show to the youth the relationships of vocation. Let me take a few moments to illustrate this from the field of agricultural education. The most primitive agricultural practice was, perhaps, an American Indian, pushing a stick into the ground, and depositing in the hole a kernel of maize. It is still possible for an ignorant man, on a fairly fertile piece of land, to raise a sufficient amount of food to meet the actual wants of himself and his family, and to have a little surplus for the purchase of a few things which he or his family cannot produce. But the time is rapidly approaching when this will be a very difficult thing to do. Even now, only a high degree of skill and intelligence can secure from the soil a reward which the intelligent man thinks is necessary in our modern civilization. It therefore becomes not only possible but necessary, in training a man for efficient industrial life on the land, to broaden his knowledge not only of his special business, but of the larger interests of life. Thus he becomes both an efficient worker and a trained man. His vocation gains the dignity that belongs to it. He must, for instance, on the technical side, develop manual skill of a fairly high order; for the good farmer is a skilled worker. As a producer, he must understand the great natural forces that govern the production of plants and animals. He may not be, and need not be, a scientist, but he works constantly with at least some of the materials that go to make up the sciences of chemistry, of physics, of geology, of climatology, of zoölogy, of botany, of animal and plant physiology, of bacteriology, of entomology. In the breeding and feeding of plants and animals, he is dealing at first hand with the very fundamentals of scientific knowledge and inquiry.

On the business side, there is not only demanded a knowledge of ordinary business methods, but the farming industry is constantly at the mercy of great economic forces—railroads, market conditions, and the competition of great combinations of capital. The well-trained farmer will know something of the history of agriculture, of the development of world markets, of the methods of successful co-operative buying and selling, and of the relation of his business to the great economic questions of transportation, taxation, and the tariff. If the farmer is trained for leadership in the community, he comes on the social side into direct contact with the great problems of education and organization. He deals with forces that may make or unmake our rural civilization.

Thus if we are to fit a young man adequately for the proper pursuit of the business of agriculture, we are obliged to give him an education that teaches in some degree, at least, the various relationships of his vocation, both personal and social. Now if he really gets the training just outlined, and if he actually follows his vocation in the light of these larger relationships, is he not liberally educated? What can be more broadening for the average man of slight leisure? What is more conducive to sound culture than that out of his immediate daily environment the man shall gain an *appreciation* of that environment? What order of life for the average man could minister more

completely to his personal growth than the pursuit of a vocation in this fashion? What could better help the man who toils into a fuller social service?

Of course in this discussion of vocational education, we will be confronted by the query: In thus emphasizing the dignity of vocation, do you not make vocation co-ordinate with life, and preparation for vocation co-ordinate with preparation for life? I do not think so. Vocation admittedly has its limitations. Vocation ought not to be all of life. There ought to be leisure—a noble river of life springing from great intellectual and spiritual fountains that are unsullied by the débris of toil. But what I plead for is the recognition of the part which vocation actually does play in life, and its undeveloped possibilities for personal growth and social welfare. Pedagogically, we must discover and apply the educational values of an adequate preparation for a broad personal and social functioning of vocational experiences. Then why not give preparation for vocation the proportions which vocation is finally to take? We sometimes hear slurs about “bread-and-butter education.” Such criticisms are superfluous. The constructive thought is that vocation is not merely bread-and-butter-getting, but it is *life*. True, it is not all of life, but it is a large part of life as it is actually lived by real men.

It is said that Wendell Phillips once remarked: “The best education in the world is that got by struggling to get a living.” But we have said, “We will first train men, then we will train workers.” Should we separate these ideas? Practically we have failed to a large degree in the first purpose, simply because a man’s work is a part of the man. So far, we have almost entirely failed in the second purpose, because the boy has not waited for us to get thru with the process of training him as a man, according to our ideas of what that training should be. So we have had no chance to train him as a worker.

We are yet inclined to treat preparation for life as something different from preparation for vocation, and education for vocation as something apart from general education. In some way, we must co-ordinate these things. We must fuse them. Preparation for vocation must bear somewhat the same relation to schooling as vocation bears to life. Let us then determine the place of vocation in actual life and its further possibilities. Let us dignify vocation as the first term in industrial education.

II. INDUSTRIAL EDUCATION A PHASE OF THE PROBLEM OF UNIVERSAL EDUCATION

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Rightly or wrongly, for good or for ill, we are committed to a policy of universal education, a policy whose wisdom, I believe, has passed the stage of discussion among thinking people.

Now, no system of education, however good in itself, can claim to be or

hope to become universal if it does not touch and benefit all classes of men, and all legitimate branches of their activity, both industrial and non-industrial, vocational and non-vocational. Indeed, universal education means exactly what it says—the education of all sorts of men for all sorts of purposes and in all sorts of subjects that can contribute to the efficiency of the individual in a professional way or awake and develop the best that was born into him as a man and a human being.

Looked at in this broad way, industrial education does not differ logically from any other form of professional training that requires a large body of highly specialized knowledge. Nor do industrial people, as such, necessarily constitute a class by themselves, but are men like other men, who love and hate, who earn and spend, who read and think, and act and vote, and do any and all other acts which may be performed by any other citizens. Now all of this leads me to maintain the thesis that industrial education is not a thing apart but is only a phase, albeit an important phase, of our general system of universal education, a thesis that is the more plausible when we remember that all men need two educations—one that is vocational and one that is not; one that will fit them to work and one that will fit them to live. When we remember that there is less difference between industry and occupation than we once assumed; when we remember that 90 per cent. of the people follow industrial pursuits and will continue to do so; when we remember that all major industries like other essential activities must go on in the future as in the past, even tho every man in the community were a college graduate, and when we remember that it is for the public good that these major industries be developed and occupied by educated men, surely this position is not unreasonable.

All parties are agreed these days that in order to secure a fair degree of efficiency in some way some sort of specialized instruction should be given in industrial pursuits. The old apprentice system has passed away and the work of instruction for industrial efficiency seems to be thrown upon the schools. It is a new problem and they appear not to know quite what to do with it. It is perfectly clear that industrial education calls for new and different courses of instruction from those designed to fit for non-industrial pursuits, and the question is whether these constitute a part of our public-school duty or whether the peculiar educational needs of industry and of industrial people may be left to take care of themselves. In discussing industrial education, as with all other forms of education, it must always be remembered that we are dealing with the man as well as with the craftsman, and I use the term craftsman in its broadest sense to cover the work of the lawyer as well as that of the farmer.

And this man—what of him? Surely he is a factor in the case. He is something more than a farmer or a doctor or a lawyer, or else he is something less than a man. His education is not to be limited by the demands of his vocation. We have too many of that kind already in all professions—a kind

of museum of educational parrots that go thru their daily stunts, each considering himself highly educated and all other men at best merely trained.

Yes, the man himself, the human element in the case—he must be educated. And if he be truly educated he will first of all be trained in some profession—no matter what—and he will, second of all, be trained outside of his profession so that he will be bigger than the means whereby he earns his bread and butter: and this applies to all men of all vocations, for there is no such thing as a learned profession except in the sense that all the major activities are learned.

And so I lay down the proposition that whether the education be industrial or otherwise vocational, it is but a part, tho an essential part, of the education of a man, and that all these specialized forms of vocational instruction are but different phases of our great problem of universal education, to which we as a people are committed.

Like all great purposes actuating the masses of men the development of this idea of universal education has been a growth. It began with the conviction that in justice to the individual and in safety to the state, all men of all classes should possess at least the rudiments of learning, and the first step toward a complete system of universal education was the free public school wherein the child of the rich and of the poor alike, whether genius or dullard, may learn to read and to write and to reason, which after all are fundamental to all education. And so it is that our elementary education is universal in the sense that it applies to all the children of all classes of people and without discrimination.

This marked a new epoch in the life of industrial people, because hitherto the policy of the world had been to keep working-folk ignorant in order that they might remain contented with the hard lot to which Providence had presumably assigned them; because, forsooth, must there not be hewers of wood and drawers of water? So were laid the foundations for a system of universal education—universal in the sense that it applied to all men—affording not only the rudiments of learning but opening a highway even to the college and the learned professions, and many escaped thereby from a hard life of toil.

But no scheme of education is truly universal or can hope to become so until it not only touches and uplifts all classes of men but also touches and uplifts their industries as well; for it is not expedient that men should desert industry as soon as they are educated, but rather that they should remain and apply their education to the development of the industries, that the people may be better served and the economic balance of things be not disturbed by the evolution of an educational system aiming to become universal.

The need of attention at this point became evident especially to industrial people, and on July 2, 1862, Abraham Lincoln affixed his signature to the most far-reaching bit of federal legislation ever enacted. I refer to the land-grant act whereby there was provided for each state of the union "at least one college whose leading object shall be, without excluding other scientific and classical

studies, to teach such branches of learning as are related to agriculture and the mechanic arts in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life." Here we have the whole scheme not only of industrial but of universal education in a nutshell—a liberal and practical education without excluding scientific and classical studies: what a text for an educational discourse!

Building on this broadest of educational foundations most of the states have established industrial education on a new basis, and some of them have so combined and interwoven it with other forms of education that none can tell where the one leaves off and the other begins. These are the great state universities whose lead in this respect is being rapidly followed by institutions not on the land grant foundation, until now we can truly say that on college levels today industrial education is not a thing apart, but is an integral portion of the great educational effort by which the people of a commonwealth seek both to educate all classes of men and at the same time develop their resources, their industries, their occupations, their literature, their art, and their activities generally. This is universal education in its fullest sense.

Our elementary education, therefore, is universal in a sufficient sense, and our university education is rapidly becoming universal in its broadest sense, because here all subjects are studied and taught and all occupations and industries are represented and made to flourish in a common atmosphere of higher education.

But as yet we have no system of *secondary* education that can be called universal and until the matter is settled, and settled right at this point, our system is weak at its most important level, because it is our secondary education that touches our people during their formative period and that really reaches the masses in such a way as to be truly universal in extent.

I say that our secondary education is not yet universal. True, the high schools are open to all who have finished the grades, but they do not offer to most classes of people that instruction which is a preparation for life and which the needs of the times and the impulse of the people demand.

The high schools took their cue originally from the old-time academies which were training-schools for classical colleges. Since then primary education has become universal because it involved nothing but opening the schools to all the people free of tuition. The education of the colleges has become, or is rapidly becoming, universal because the people demand that the benefits of higher education shall not be limited to a few favored occupations and those who follow them—all upon the ground that such a course would be pernicious because against the public welfare.

The same influences are beginning to work in our high schools, which are moving in the wake of the colleges, it seems to me, in a way that is wholly commendable, and that needs only to be accelerated and not retarded.

The high schools are schools of the people and in response to their demand they have added to the old-time classical courses those in modern science,

in manual training, in household science and, indeed, many are now adding agriculture, stenography, telegraphy, book-keeping, typesetting, and a list of vocational courses almost too long to be mentioned, all without prejudice to, but vastly to the enrichment of, the old-time courses of study.

So the high schools are rapidly following in the lead of the colleges and if matters go on as they are now drifting in some of our best schools, it will not be long until, in response to public demand and common-sense, we shall have a complete system of universal education in the largest sense of the term and of all grades from the elementary schools upward, in which men and women of all kinds and preferences will be able to get that education which will not only fit them for life but fit them to live. In the name of progress let this good work go on.

There are but three influences, it seems to me, that can interfere with the proper evolution of the high school. They may be outlined as follows:

1. The movement in certain quarters for separate industrial schools—agricultural schools in the country and trade schools in the city—quite independent from the high-school system which is assumed to be indifferent if not antagonistic to industrial life.
2. The attitude of a few remaining exponents of the old idea that schools should teach nothing that by any possibility could be put to any manner of use.
3. The difficulty involved on the part of the high schools in adding not only to their educational purpose but to their courses of study, their equipment, and their teaching force, with sufficient rapidity to meet the new demands and mold the whole into an educational unity without such delay as shall make the claim seem true that after all the high schools have no real desire to serve the people in their industrial activities, but will do no more than is necessary to half satisfy what they regard as an irrational public demand. Thus the high schools are put at disadvantage at this most difficult period in their evolution, particularly as teachers are yet to be made even while these new ideals are to be fitted into and made a part of our permanent educational policies.

Now these considerations are worth reviewing at the present juncture, because what the high schools need is time, and this is the element in the case least likely to be afforded. The activity of certain educators in favor of separate agricultural schools of one kind or another, and what I am bound to call the selfish influence of certain commercial interests demanding city trade schools to teach that sort of handicraft which will produce skilled workmen in the shortest possible space of time and best enable us to meet foreign or other competition in manufactured articles—this activity and this influence seem ready to sacrifice almost anything for immediate results. This American edition of the German peasant school idea is a most dangerous because a most insidious and powerful menace to the right development of the American high school, which is or may be the most unique educational institution on earth, and which will constitute, if it can rightly develop, the key to the advantageous position which America ought to occupy both socially, politically, and economically, and which she can occupy if she is far-sighted enough at this point and at this time.

If present tendencies can go on unhampered, it will not be long until every community can have its high school which will reflect with a fair degree

of accuracy its major industries and do it, too, in the light of the world's knowledge and of the world's ideals. Such schools will turn out men and women ready to do the world's work and to think the world's thoughts as well as to dream the world's dreams and share in its ambitions. If we combine our energies we can have such schools in America wherein every young man and every young woman can secure an education that is at once both useful and cultural, and that, too, within driving distance of the father's door. If we unite our educational energies we can do this but we cannot do it in separate schools.

We can combine the vocational and the non-vocational in our high schools if we will and each be the better for the other. On the contrary, if the arts and crafts and industries are taught in separate schools the following results are inevitable:

1. There will be as many different schools and as many different forms of education as there are different forms of industry, with little of mutual sympathy and nothing of community of purpose.

2. The vocational future of the individual will be decided not by intelligent choice but by the accident of proximity to one of these schools or the exigency of earning power.

3. If industrial education is given only in industrial schools, then the high schools will lose forever their hold upon the masses, for 90 per cent. of the people are industrial and always will be, and boys will follow occupational instruction. This will reduce the high schools to the teaching of girls and the work of preparing for college and they will lose forever the influence upon American life which they might exert by molding the ideals of the masses as they instruct them in their industries.

4. The separate industrial schools will always be inferior to what the high school might be, for, being established to serve special ends, they will naturally attain those ends by the most direct means possible: indeed they must be almost exclusively technical or else resort to an amount of duplication and expense that would hardly be tolerated by their patrons.

5. The products of these schools would be successful from the narrowest business standpoint; but unsuccessful from the larger point of view: they would be trained rather than educated.

6. Such schools would force boys to choose their calling or indeed have it chosen for them at a very early age, and without much opportunity for intelligent choice. Once chosen, however, the decision would be final. The results, however, would highly satisfy business demands which are ever ready to sacrifice the man to his efficiency.

7. If members of the several vocations are to be educated separately the education will not only be hopelessly narrow and needlessly expensive, but, what is even worse, our people will be educated in groups separately, without knowledge of or sympathy with each other, producing a stratification of our people that is not only detrimental to society but dangerous if not fatal to democratic institutions. Such schools will, however, draw the masses and have all the surface indications of success.

So, all things considered, I most earnestly advocate the taking over of our industrial education in all its forms into the existing system of secondary schools, seeing to it that one-fourth the time of every pupil is devoted to something vocational, something industrial, if you please, and no industry is too common for this purpose. It is the common things of life that are fundamental and it is thru them that we teach life itself.

It is not necessary to bring all occupations and industries into our schools; some are not well adapted to our academic conditions, but it is necessary that we bring in a goodly variety of what may be called the major activities, industrial and non-industrial, in order that life shall be taught in a variety of its forms and that the boy shall have a reasonable chance for choice.

Trade schools, would you have them? By all means, but I would have them as a part of the secondary school system. Agricultural schools? Yes, but as departments of the high school. Cooking schools? Yes, and more: I would have schools of household affairs, but I would have them as integral parts of the high school. Schools of stenography and typewriting? Yes, but I would not disconnect them from the high school any more than I would cut off from womankind the girl who needs perhaps for a time, perhaps always, to earn her own money.

In brief, there is no class of occupation that is followed by large masses of people that I would not bring into the high school and teach as fully as circumstances would permit, and I would compel every student to devote not less than one-fourth and not more than one-half his time to these occupational lines.

I have said that a second influence operating to restrain the high schools from moving in this matter as fast as conditions require is the remnant of an old academic belief that the purpose of schools is to "make men," whatever that may be, as distinct from making men ready for life. These are they who would teach nothing that could by any means be put to any sort of use. With them education is a luxury, not a necessity, a kind of holy thing that evaporates or in some way loses its essence when put to common uses or into the hands of the masses of men.

These be they who are always careful to speak of industrial education as "training," using a term whose meaning is understood from its frequent application to horses and dogs.

Now to such let me say that the thing which all men everywhere now demand, whatever their vocation or means of livelihood, is not training merely but *education*, and they mean by that such contact and intimacy with the world's stock of knowledge as shall first of all develop the industry, and second, but not secondarily, develop also the man.

Thinking men now know that, education or no education, culture or no culture, whatever the grade of civilization we may evolve, certain fundamental industries must still go on. Moreover, they know that if these fundamental industries are to be well conducted and our natural resources developed, then these activities must be in the hands of capable men; yes, of educated men, for industry, like every other activity of man, is capable of development by means of orderly knowledge and trained minds.

They know, too, these thinking people, that men of capacity cannot be found to develop these fundamentals except they may also themselves partake of the blessings of life and the full fruits of our civilization. They know that

the days of the hewers of wood and the drawers of water, as such—condemned to a life of drudgery—are over on this earth wherever civilization exists, and that education, like religion, must somewhat rapidly readjust itself to new conditions and prepare to help the common average man to lead a life that is both useful to the community and a satisfaction to himself.

The aristocracy of education, like the aristocracy of religion, whereby a few were saved at the expense of the many, is over, and education, like religion, must help the common man to meet and solve the common issues of life better than they have ever been met and solved before—hence industrial education; hence vocational education; hence universal education.

These good people who shy at the term industrial education are remnants of a past condition when educators and others entertained that old-time and curious conception of industry, whereby industrial people were assumed to be uneducated and were by common consent assigned a social position of natural inferiority, as if a farmer or mechanic, for example, acquired by his daily life a kind of toxic poison that not only destroyed his better faculties but was likely to exude and soil or injure others.

Let me call the attention of these good people to the fact that whatever their social status the industrial people hold the balance of power politically and socially, for they constitute 90 per cent. of the population, and that for all practical purposes and in the last analysis they are the people, and their education, whatever it is to be, will really constitute our system.

The colleges learned long ago that to meet modern needs they must afford every man two educations: one intensely technical to meet his business needs and make him an efficient member of society but which would tend to narrow him as a man; the other non-vocational, which has no money-making power, but whose effect is to liberalize and broaden the man by attracting his interests and widening his knowledge outside the field wherein he gains his livelihood.

Now the high schools must learn the same lesson and the sooner they do so the better for all interests. Therefore these high schools that are introducing the industrial are developing in the right lines. The high schools are not preparatory schools for college. They are pre-eminently the schools wherein the people are fitted for life. Where one man is educated in college, twenty will get all their preparation in high schools. The high school, therefore, is the place wherein the boy shall find himself to the end that if he goes to college he will have, upon matriculation, exceedingly clear ideas about what he intends to do, and if he does not he can go out from the high school at once and take some useful part in the world's work. The large number of high-school men, even graduates, who have no plans and, more than all, no fitness, preparation or inclination for any sort of useful activity, is a pathetic and a dangerous fact—pathetic because so much good material has been wasted; dangerous because the high schools must either change their ideals and introduce the industrial freely, or the industrial masses will find other schools of

their own that will meet their needs as they have been met on college levels but as they have not yet been met in secondary grades where the masses go.

Now the colleges have learned that it is not necessary to absorb all the time of a student in order to turn out an efficient man vocationally. Much less is it necessary in secondary schools. On college levels, from one-half to two-thirds of the student's time suffices for the vocational, and when we learn better how to teach, results can doubtless be attained with still less, leaving a generous amount of time for the pursuit of non-vocational and therefore of liberalizing courses, for the effect of a course of study, whether narrowing or broadening, depends less upon the subject matter than upon the attitude of the student and the purpose for which he takes the course. Chemistry is a professional study to the prospective farmer, while to the journalist or the lawyer it is non-professional and liberal.

If we will honestly take into our high schools, as we have taken into our universities, all the major activities, splitting no hairs as between the industrial and the professional, for no man can define the difference, so imperceptibly do they shade the one into the other—if we will take them all into the high school as we have already taken them into the universities, and carry them along together, the vocational and the non-vocational side by side, day after day, from first to last, so the boy is never free from either, then will all our educational necessities be met and we shall have gained a goodly number of substantial achievements, prominent among which I would mention the following:

1. One-fourth of the time of the boy or girl could be devoted to vocational work in classroom or laboratory thruout the course.

2. This would turn out every boy with some skill in some branch of the world's work, and do away with that large and growing number of young high-school graduates who are fitted for nothing and are good for nothing in particular.

3. It would attract the attention of the boy to self-supporting activity before he loses his natural ambition by too much schooling with no initiative.

4. It would turn out girls with some training in household affairs, and those who desired it in such occupations as women follow for self-support.

5. It would vastly uplift most occupations and all of the more ordinary industries by bringing into their practice the benefit of trained minds and methods.

6. It can do all this and still leave three-fourths of the time for the acquisition of those non-vocational lines of knowledge which all men and women need, because they are human beings getting ready to live in a most interesting world.

7. In this way, we should have a single system of education under a single management, but giving to all young men and women really two educations: one that is vocational, fitting them to be self-supporting and useful, the other non-vocational and looking to their own development.

Expensive? No more so than to have it done in separate schools, surely. It will be done somehow, and the only question now is, will the high schools really rise to their opportunity and secure thru themselves a real system of universal education, or are they to lose their chance and we to have in the end not a real but only a patchwork imitation of a system of universal education?

I am perfectly well aware that all this will be held by some as a lowering

of standards and a degrading of education by commercializing it. Against this conclusion I protest most emphatically. Does it degrade a thing to use it? Does it degrade religion to uplift the fallen or to sustain the masses of men from falling? Is education a luxury to be restricted to a few favored fortunates or is it a power to uplift and sustain and develop all men?

Are you afraid to educate the ditch-digger? Is the education of the gentleman too good for him? Are the facts of history too profound or the satisfaction of knowledge too precious to be common property of man? Does it make my satisfaction less when it makes his more, or are you afraid that he will climb out of the ditch if he is enlightened? There is no danger of that. I have dug ditch and laid tile every month of the year and that since I was a college graduate, and I am ready to do it again. I am ready to do my share of the world's work: yes, of the world's dirty work. It was Colonel Waring who cleaned up New York City. It was the educated engineer who made a sanitary Cuba. The educated man does anything that needs to be done to get results. It is the uneducated or the badly educated who fails to comprehend the eternal balance of things.

I desire to call attention to one more phase of our problem, to what may be called our leisure asset. There are two leisure classes, one few and unimportant, the other large and important. The first consists of the idle rich who by accident were born after their fathers, and who intend to live a parasitic existence, paying for their needs with other people's money. They are altogether useless. It matters little how they are educated and the sooner they die off the better for the world. They do not think: they do not act: they only vegetate and glitter. The wealthy who do not belong to this class are too busy for leisure.

The other leisure class is the great industrial mass, who, after all, own and control about all the useful leisure in the world. The minister has no leisure. The teacher has no leisure. The lawyer, the leader everywhere, has no leisure. What he does he does under pressure and because he must.

But the farmer, the craftsman, the industrialist generally, labors only in the daylight hours and for a portion of his time. What he does with the balance of his waking energies is of the utmost concern. Here is the great racial asset, both social and psychical; both economic and political.

If this great mass of men, constituting all but the degenerates, can be properly educated, the racial asset of their leisure moments will in the end be tremendous. It is this mass, and what it thinks and does in its leisure hours either blindly or intelligently, that will ultimately fix the trend of our development and the limits of our achievements. It is better that they be educated and educated broadly.

Moreover, it is out of this mass that leaders arise, and if their education be sound, then will our leaders be wise and safe. You cannot maintain any more an educated aristocracy. There will be but one aristocracy and that will be the aristocracy of personal achievement, and if we do not want the

world entirely commercialized we must so merge our industrial education into our general system as to have in the end not a mass of separate schools with distracting aims and purposes, but a single system of education catering to all classes and all interests. It is the only influence that will preserve a homogeneous people.

In thus amalgamating the vocational and the non-vocational, I would like to say a word for what might be called the parallel system as distinct from the stratified. That is, I would have a boy from his first day in the high school to his last have to do with both the vocational and the non-vocational. I would have him every day take stock of things vocational in terms of world values. I would have him devote a full fourth of his time to what will bring him earning power, to be used for that purpose if he needs it, and to give him an independent spirit if he does not need it. Every man is a better man if he feels the power to earn his way, whether he needs to do it or not.

Do you say that this will so cut into his time as to prevent his getting an all-round education? Then I will say that he will never get an all-round education any way: that the most he knows at forty will be learned out of school and that the business of the school is to give him a good start.

I beg, too, for a reform in the idea that a course is framed mainly for the one who graduates. If the vocational and the non-vocational are properly paralleled the course is good from whatever point it is left, and whenever abandoned it has taught the student the proper balance between industry and life: between the means and the ends of life.

All this will take time because it means to some extent the readjustment of ideals, the addition of new courses of study and of new materials and methods of instruction. It means the making of a new class of teachers who must largely train themselves by a generation of experience. It means the making of a more complicated system of instruction than has ever been undertaken—a system as complicated as American democratic life.

But it is worth the while for nothing better is possible. It is easier, of course, to short-circuit the matter by assenting to the separation of industry and education, but no race need hope for supremacy nor for the evolution of its best till it combines industry and education, which belong together in the schools as they do now and always must in life.

So I say to the high schools—Do not wait for approved courses of study, nor for the production of skilled teachers. Go ahead and do the best you can. An honest effort is half the battle, and it is worth more now than it ever will be again. Do not hesitate till methods are marked out. If you do that, you and the cause are lost, for the separate industrial school will surely come. We know the ideal—an educated American in all the activities of life. Let us go ahead and produce him and mend our methods later on.

Education is no longer a luxury. It has become a necessity for the doing of the world's work. It is no longer for the edification of the few; it is for the satisfaction of the many. And whether we regard it as industrial or non-

industrial; as contributing to the efficiency of men or to their elevation in civilized society; however this or any other educational problem is regarded they are all but phases of our general and stupendous problem of universal education, in the working-out of which there are as yet no models for the American secondary school.

III. INDUSTRIAL EDUCATION AS A NATIONAL INTEREST

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There can be no doubt that industrial education is needed to perpetuate the prosperity of our industries. This aspect of the case has been widely discussed, and may simply be taken for granted here.

The point to be chiefly emphasized at the present time is that the great, dominant need of the United States as regards education is the same now that it has always been. It is the need of a body of citizens who are free, thru intelligence and self-control. The main business of American education for the future as in the past is the training of our people to genuine freedom. And that means a training to intelligent self-direction in the paths of righteousness. We still believe that such training is possible, and that it is worthy of our best endeavors.

Does this imply that special training for the industries is unimportant? Far from it. New wine may not be put into old bottles, but old wine must often be put into new bottles. The old spirit of our education must pass over into new forms of education to meet our present needs. In dealing with this newer education, we must have due regard for sameness and due regard for difference. Let us speak of difference first. There is danger that our new, industrial education will be made so like the older education that its distinctive values will be lost. If we are not exceedingly careful, that will be the result where industrial courses are organized in the old schools. We may get simply the old book-and-laboratory education masquerading as industrial education. Such a fiasco is by all means to be avoided, even if we have to make new schools in which the new training may fully establish its differentia.

Let us next take account of unity. If we can fully secure the requisite difference, there is great gain in having the new courses organized in close connection with the old. We emphasize thereby the unity of our people in all of their classes and employments. But if the new training must to some extent go into separate schools, let us by all means keep those separate schools in the closest spiritual connection with our general system of education. The special schools need such connection and the general system needs it equally. A technical training which produces mere manual skill is not what we want. We want a technical training that shall educate. If our trade schools seek only to cultivate skill, they will not contribute to the improvement of our industries; they will simply turn out superior machines for a stationary

industry. On the other hand, if our general education does not eventuate in skill, it will give us a scholastic class, who can only look helplessly on the progress of an industrial life in which they have no part, as Sir Percival in the castle gazed upon the procession of the Holy Grail.

The bond of unity between general culture and training for a trade is the later development of our conception of general culture. We are familiar with that form of culture which takes one out of the limitations of daily life by means of ideas and associations which are remote from daily life. This is the liberal or classical culture in its various forms. Such culture is everlastingly justified; and a training which has no power to lift the learner out of the pit of present sense and experience can be only a truncated and inorganic fragment of an education. Where vision fails the people fail. But that higher culture, too, is only a part, and it may make for a painful isolation of its possessor. Now we are finding ways of bringing out the spiritual interest, the world-ideas and world-sentiments, which are latent in the plainest everyday life. When we have gone farther and have made every common environment yield up its inherent educational values, then the connection between scholastic culture and the trades will be confirmed and realized.

Should the state concern itself with industrial education as herein set forth? I think it will be under the necessity of so doing in some measure, both for the sake of its industries and, still more, for the sake of its citizenship.

Should the national government have a part in the undertaking? That is a more difficult question, but the answer may still, I think, be in the affirmative. The nation cannot be indifferent, it cannot but have the liveliest interest, where both its industries and its citizenship are concerned. From the beginning it has contributed to the furtherance of education in the states, largely by grants of lands, but in the case of the agricultural and mechanical colleges by annual grants in money. This policy has been abundantly justified in its results. Its extension to schools of a somewhat different grade or character would be so slight a change that it could not be called a departure from our governmental traditions.

But any far-reaching measure in this direction should be taken with due care and foresight. It should not be taken at all if the matter can be adequately cared for by the several states. In any case it should not be taken in such a way as greatly to disturb the various state systems of educational administration. A careful examination of those systems, as related to the proposed plan for national subventions, should be undertaken, and the federal government should proceed in the matter only in such way or in such ways as will strengthen the hands of the state educational authorities.

Many interests, other than governmental, are profoundly involved in the industrial education movement. They must be considered in all fairness, but from the public and national rather than any private point of view. We cannot direct the industrial education in rural schools simply to the end of keeping young people on the farm. Young people in the country should have their

fair chance for any honorable career, in city or country. But country life, too, should have its fair chance to make its legitimate appeal to these young people as well as the life of the city.

The point of view of the employers of labor must be carefully considered, for the wisdom which the direction of great industrial concerns may have taught. But we must not permit industrial education to be directed solely to the increase of production. That would be to subordinate citizens to industries. Broad-minded employers are among the strongest opponents of so shortsighted a policy.

The point of view of organized labor must be carefully considered. However much objection there may be to the methods of any particular labor organizations, it is plain to see that organization is better than disorganization on both sides of the industrial world. Here again the public good is the supreme consideration. We cannot willingly permit the policy of trade-unions to keep any number of our young citizens permanently barred from preparation for some honorable manual occupation. On the other hand, we cannot willingly permit industrial schools to be directed to the disorganization of labor. The relation of school training to apprenticeship in industrial education calls most urgently for fair and thoro investigation and for many and varied adjustments.

And now, just here, we come to the main purpose of this paper. The national problem of industrial education must be solved by a co-operation of industrialists, politicians, and educators. But the chief burden of the solution will be carried by one or another of these three classes. The men of business and the men of politics wield tremendous forces and bear tremendous responsibilities. They are entitled to the respect which these circumstances command. But it is of the utmost importance to our national life that our educational profession shall be found worthy to take the lead in determining the course of our industrial education. The public will be guided by our best judgment in this matter, if it shall clearly appear that the school men and women are the ones who take the broadest, fairest, most genuinely progressive view of our position and our needs; if they make some approach to unanimity in their attitude toward the newer proposals, which shall not be simply an immovable and unintelligent conservatism nor an equally ill-considered stampede in the new direction; if they devise wise and practicable plans for new undertakings, not asking large outlay for hasty ventures, but standing vigorously for well-thought-out plans of improvement. If these characteristics shall be manifest in the teaching profession of this country in the face of the present situation, the solution of the problem of industrial schools will be an educational solution. And that, from the point of view of national interests, is devoutly to be desired.

IV. GETTING OUR BEARINGS ON INDUSTRIAL EDUCATION

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The industrial-education craft has steered a devious course during her eventful voyage. Twenty-five years ago she was flying the flag of manual training at her main mast. Against headwinds, thru heavy seas, sometimes, apparently, with faulty chart and compass, her pilots have brought her thru—somewhat battered and scarred, but still seaworthy. She has lately been dry-docked, scraped, and painted; equipped with twin propellers and turbine engines; provided with a new figure-head; renamed; compass-adjusted; and now flies the pennant of industrial education.

That she is the same old craft will be evident, however, to anyone who will read the specifications of the old vessel and compare them with those of the repaired and re-christened ship that has so recently and so gallantly put out to sea. To one accustomed to the uncertainites of tacking against headwinds in a sailing vessel, and of drifting idly on a calm sea, waiting for favoring breezes, there seems to be magic in the resistless headway that our ship is making under the driving force of her engines. If only her course be true and her charts trustworthy, there can be little doubt that the newly launched craft will bring us surely and speedily toward our home port. The perils of the sea are numerous, however, and not always to be anticipated. Like the watchful mariner, we should seize every opportunity for determining our exact position by getting our bearings on a light, a point of land, a barren rock, a fixed star, or the sun itself.

Without pursuing further this fanciful figure, let us examine directly some of the bearings of the present national agitation for industrial education. It would certainly be hazardous to make any single statement designed to give the present attitude of the country at large toward industrial education and manual training. It is possible, nevertheless, for us to find some fairly definite indications of a few tendencies, and to examine very briefly the significance of these tendencies in the general educational movement of today.

The past few years have seen the organization of divisions of industrial education within state education departments; the establishment of independent commissions on industrial education, of national and state associations for the promotion of industrial education, and of a national commission on country life. The need of industrial education has been emphasized again and again by the United States Commissioner of Education, by many leading state and city superintendents, by the governors of numerous states, and by the President of the United States in at least two of his messages. It has been vigorously urged by manufacturers' associations, labor organizations, associations for civic betterment, charity organizations, and political parties. State legislatures have passed favorable laws and periodical publications have given to the industrial-education propaganda a degree of publicity and support that they have rarely accorded any similar public movement. Various teachers'

associations have given increasingly large attention to the question and the Manual Training Department of the National Education Association has given over its programs almost wholly to its consideration. A new department of technical education has been organized. The general programs of the Association and of its Department of Superintendence have given much time to the subject and many speakers of high ability have discussed its social, economic, and educational bearing. In short, we have had almost all of the possible accompaniments of a system of industrial education except industrial schools; and doubtless we shall have a plentiful supply of these in the very near future.

There are, in the United States, about one hundred and fifty schools of secondary grade which may properly be designated manual-training or industrial-training schools. Of this number, thirty are public high schools and are known variously as manual-training high schools, technical high schools, and mechanic-arts high schools. Most of them give from five to nine hours a week to manual, technical, and industrial instruction. Some give as little as four hours, and a few as much as twelve hours a week to such instruction. Six of the thirty schools report that they give all of their time to technical, industrial, and trade instruction, which indicates that these schools may be dealing in a serious way with genuine vocational problems and may be called industrial schools in the sense attached to that term in current discussion. In general, however, it may be said that high schools of the manual-training type are dominated by the same purpose that controls ordinary high schools and that this purpose is distinctly not vocational unless we include attendance upon college among the vocations. It may confidently be asserted, furthermore, that, with the exception of the new Cleveland high school and possibly one other, there does not exist today in the United States a public secondary school that, with strict accuracy, should be termed a technical high school.

Of the thirteen hundred city-school systems in the United States, almost exactly one-half have introduced, somewhere in their curricula, various forms of constructive activity known as handwork or manual training. In about one hundred and fifty of these cases, handwork extends thru all of the grades of the elementary school, and in about one hundred cases it is given in the high schools. In some cases handwork is given in the kindergarten only; and between this extreme and the other extreme of manual training in every grade, there are all possible differences in practice.

While, on the whole, the manual-training movement has had a salutary effect in directing attention to the right relation between theory and practice in education, it is nevertheless true that handwork in the schools is still mainly abstract, isolated, impractical, and unsocial in character. It is very largely lacking in rational content and therefore in educational worth. As "busy work" and relaxation, it no doubt performs a function of some value. The very name "manual training," however, is suggestive of a discredited psychology. With a few gratifying exceptions, handwork is a fungus growth on an

otherwise ill-proportioned and misshapen curriculum that needs not so much to be pruned and trained as to be uprooted and replaced by a more vigorous and more productive plant.

To put the matter positively, the great educational need at this point is for us to recognize in our practice what many of us profess to accept in theory—that constructive handwork is an indispensable means of developing intelligent ideas, sympathetic appreciation, and executive efficiency in relation to the industrial side of human society. “Manual training,” in other words, should be replaced by the intelligent study of the constructive, industrial factors of social progress.

It should be noted that the kind of study here proposed might as properly be termed “industrial education,” as the training for skill in industrial vocations that is everywhere now being so vigorously demanded. It may indeed be doubted whether, without a basis such as that suggested, industrial education can be saved from the isolation, the unsocial and even anti-social tendencies with which the present curricula have been charged.

A few weeks ago I was inspecting one of the largest manufacturing establishments in New York state, which had recently organized a school for apprentices, provided it with a thoroly modern equipment, and placed in charge a well-educated man of high ideals and practical ability. Here, I thought, I had found an enterprise that might have something to teach the schools concerning their effort to meet concrete social needs. The master-mechanic to whose initiative this school was due told me, however, that he had serious doubt as to the practical value of his apprentice school. He thought he would direct the teacher to use the machines for demonstration purposes only, as the boys spent too much time “figuring out how to get a piece of work set up and how to get the thing done.” “These boys,” he said, “will work all their lives for our company and we want them to do things our way. We don’t want the boys to draw; we want them to read drawings. We don’t want them to figure; we want them to read figures. We don’t want them to boss; we want them to be bossed.” And he might have added, we don’t want them to think but to become automatic machines.

The objection of this master-mechanic was to any system of training that develops initiative and independence. While his view is certainly not that of the most far-sighted manufacturers who are joining in the cry for industrial education, his attitude does represent a somewhat common tendency to regard industrial efficiency as the sole standard by which to measure the value of industrial education. There is need for a resolute stand against every attempt to exploit the efficiency of the rank and file in the interest of private greed. Education must never lend itself to any movement that ignores the fundamental truth, that to make a life is of greater consequence than to make a living. By every proper means, education must seek to rectify the standards of industry itself and to promote a genuinely social consciousness among our people.

The ideals of industrial, as of all other forms of education, can be stated,

then, only in terms of social intelligence, social appreciation, and social service. Any attempt to isolate completely the problems of industrial education must accordingly fail; for society is essentially organic, and every truly social problem is shot thru with a thousand threads of social complexity. In all of its essential qualities, therefore, industrial education, in common with education of every other type, must conform to the great underlying needs of men and women composing a human society.

To say that industrial education introduces no fundamentally new principles, and that every important principle applicable to industrial education applies also to education in all of its aspects, is not, however, to overlook the necessity of working out in detail the application of such principles to the peculiar requirements of those boys and girls who are looking toward industrial vocations. A few general ideas will here be suggested which should help us to keep our bearings in making this application.

First, it is important that we make a clear distinction between elementary and secondary education. Neither in our thought nor in our practice have we thus far drawn this distinction with sufficient clearness, but have merely assumed that during the period of early adolescence the minds of boys and girls are sufficiently "mature" to warrant them in entering upon the study of Latin, algebra, geometry, and the various other subjects prescribed for admission to American colleges. From this point of view, elementary education is simply that uniform course imposed upon all boys and girls who have not yet entered upon a college-preparatory course. I am sometimes disposed to think that, if we had the courage to face the truth, we should be compelled to admit that the present function of the elementary school is to eliminate 65 per cent. of its pupils so that the secondary schools shall not be overcrowded; and that the function of the latter, including the manual-training high schools, is to eliminate all of the residue who do not readily run into the mold handed out by the colleges.

I would propose the following as a rational as opposed to a purely formal distinction between elementary and secondary education. In the early stages of mental and social development, the similarities of children, for educational purposes, are more significant than their dissimilarities. This is the period of elementary education, when children may properly participate in a relatively uniform régime. When differences in taste, capacities, and ambitions become more significant for education than likenesses, whatever may be the arbitrary and external organization of education, the secondary stage in the development of boys and girls has *de facto* begun. Obviously this period begins at a much earlier point than is recognized in our present educational practice. The difference between elementary and secondary development is thus primarily a matter of mental and moral variation; not a mere matter of convenient arrangement. Differences in abilities and in interests will always demand corresponding variations in form of activity. If we persist in our inexcusable failure to provide such variations during the last years of our so-called elemen-

tary course, when individual differences appear with unmistakable and increasing force, we may expect boys and girls to continue, as they now do, to seek in the more tolerable occupations of street, factory, shop, office, and mercantile house, the kind of interests for which they feel an instinctive tho vaguely defined need.

It should be clear, then, that industrial education is properly but one constituent of an organic system of secondary education. Like the various other members of such a system, industrial schools should be designed to meet the specific needs of a well-defined group of children who by reason of common interests, common capacities, and common opportunities, are looking toward a common vocation.

It is surprising that, in the current discussion of industrial education, no more strenuous protest has been made against the early specialization that is clearly involved in the proposed program. At the risk of seeming to set up a man of straw, I shall notice very briefly some important considerations in this connection.

The arguments against "early specialization" were first brought forward with great vehemence in the discussion of the "elective system" in colleges, that loomed up so large on the educational horizon a generation ago. They next appeared in the debate concerning the introduction of elective courses into our high schools. While the ultimate outcome of this contest is no longer doubtful, the voice of protest has not yet been altogether quieted. The old familiar arguments are still urged against wider opportunity and greater freedom for pupils in high schools. We may expect these same arguments to be directed in turn against every effort to extend the elective system backward to the logical beginning of the secondary stage of education.

The outcome of the struggle between rigid prescription and free election must eventually be the same in all three of these fields, for the conflict is really one and not three. The question is whether human beings who differ widely in native gifts and acquired tendencies shall be forced to pursue a single conventional course of training, or have the privilege of choosing a course that will equip them not only for the worthy use of their leisure but for the intelligent pursuit of their vocations. Life itself is from the beginning an elective process—each individual selecting from the complex whole of experience those elements that accord with his native and acquired interests and rejecting those elements that serve no useful purpose in his life.

In a very real sense, then, it is a condition and not a theory that confronts us; for an elective system is already firmly established even in our elementary education. One of the alternatives open to a pupil is to continue in the single course offered by the schools; the other is to withdraw from school and, without adequate preparation, to enter at once upon some low-grade vocational pursuit that offers little educational advantage and a meager wage. The question is not, therefore, whether we shall extend the privilege of election to pupils now in the elementary schools, but whether by introducing courses for industrial

and domestic training within the school, we shall widen the field within which election may be made.

A rational system of secondary education must provide not only for the training of special capacities but for making children conscious of their individual abilities. One of the most serious weaknesses of the present organization of education is that the range of experience provided for in the schools is so narrow that many of the latent powers of children are not stimulated to activity. In order that a child may be placed in position to make proper choice of a school course and ultimately of a vocation, it is often essential that means be taken to ascertain what are his native capacities upon which success in every undertaking must very largely depend. These capacities cannot always be determined with reference merely to the desires of parents and of pupils or to such general advice as teachers and principals of schools are commonly qualified to give. Teachers must be equipped to recognize, to search for, and to interpret the evidences of special aptitude. This will necessitate a fuller recognition than is now given to the influence of heredity upon mental and moral traits and a more vital and practical view of genetic psychology than is yet widely prevalent.

The whole argument for vocational training is of course open to the familiar charge that it is basely utilitarian. As to the charge that such training is utilitarian, why should not the answer be what the common law terms "confession and avoidance"? Such training *is* utilitarian; but why *basely* so? Most men devote more than half of their waking hours to their vocations. Are their lives necessarily on that account basely utilitarian? Our war for independence had its origin in a question of taxation. Was it for that reason a basely utilitarian struggle for selfish ends? Almost every great national policy involves some matter of industry or commerce. Is our national life therefore unworthy of our loyal affection? The intellectual and moral progress of the race has always been in large measure dependent upon material and commercial prosperity. Are the achievements of the human spirit on that account insignificant or base? As a people we profess a belief in the dignity of work. Shall we hesitate to exemplify our belief by making it possible for every man to find his work and in his work to find a worthy means of enlarging and completing his life?

V. THE FUNCTIONS OF THE CITY TRAINING-SCHOOL

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It is becoming more and more apparent that teachers' training-schools of our larger cities must come to occupy a new position and exert a new and greater influence on public education in the future than they have in the past. Under present conditions the old city normal with its well-known limitations, its narrow and restricted conception of its own sphere and functions, must give place to the new city college of education with higher ideals, improved facilities,

and increased capacity for service. We are needing, in fact, a new type of institution devoted not merely to the training of teachers, but to the improvement in every possible way of the city-school system to which it belongs.

Six training-schools for teachers, located in our five largest cities, are charged with the tremendous responsibility of training teachers for the public schools of nine millions of people, or about one-ninth of the total population of the United States. These six schools are being operated at an annual expense to the public of less than \$350,000; while over against them 253 other normal schools, public and private, operated at an annual expense of more than seven millions, are endeavoring to take care of the other eight-ninths of the total population. From this it is obvious, first, that these six schools are by far the least expensive training-schools in the country, considering the work which they are expected to do, and may therefore justly demand, if necessary, much more liberal financial support than they now receive; and, second, that the position which they occupy is one of the greatest strategic importance in the improvement of American education. Their opportunities are indeed unique; but these opportunities carry with them great responsibilities which, up to the present time, have not been fully met, chiefly because the larger place which these schools should hold in city education has not been sufficiently appreciated or even clearly understood.

The human mind, whether collective or individual, is so constituted that it thinks only when it faces a new situation which compels it to think. So long as our great cities could, by paying better salaries and offering more frequent opportunities for promotion, entice away from the surrounding smaller cities and towns a sufficient number of their best teachers to supply a large part of their own annual needs, the possibilities of the city training-schools were naturally overlooked. But conditions have changed and this general attitude of indifference cannot longer be maintained. Every large and rapidly growing population tends to draw into itself the smaller cities and towns in its vicinity. From 1880 to 1890, for example, 792 townships in Illinois actually decreased in population, while Chicago during the same decade jumped from 500,000 to more than a million. In the case of those smaller cities, which by their industrial activity and favorable location are able to hold their own against this depopulating tendency, larger salaries than formerly are now being paid, so that when the difference in preparation and cost of living is taken account of, these salaries compare favorably with those of the larger cities in their vicinity. Hence the available external supply of teachers trained by experience in the smaller towns is at present wholly inadequate and constantly diminishing not only in numbers but also in desirability.

The necessity thus forced upon us of depending more exclusively on our city training-schools leads to a new interest in them and affords an opportunity to enlarge their functions and assign to them a more important place in public education.

What in reality should these schools be expected to do? What forms of

service can they, by their nature and the peculiar relation in which they stand to the public-school system as a whole, more economically and efficiently render than any other existing or possible agency? These are questions which it is well worth our while to consider.

In attempting to answer I shall maintain, first, that a new and higher type of institution is needed—an institution which, as such, shall unquestionably stand at the head of the city-school system because it deserves to hold that relation; second, that no expense should be spared in securing for this institution the strongest faculty that can be had; and third, that it should discharge as efficiently as possible the following functions: (1) the selection and training of new teachers—this is its primary function; (2) the maintenance of a department including a summer school for the benefit of those teachers, supervisors, and principals who are already employed in the city schools; (3) the scientific study of education.

If these three kinds of work are to be undertaken at all something more than the ordinary city training-school is required; and if they are to be well done it is evident that the institution that does them must be in a position to command the good-will, the confidence, and respect of the entire city-school system; it must in other words be able to exert a continuous professional influence that is everywhere felt and welcomed.

These results can best be realized only (1) when the college of education ranks at the head of the city-school system, and its president stands in a direct relation to the city superintendent; and (2) when the members of its faculty are recognized as superior men and women in character, scholarship, and special fitness for this kind of work. I mean by this, men and women who individually combine the best university education with good sense, skill in instruction and considerable experience in city-school teaching and supervision. Neither scholarship without practical experience nor practical experience without adequate scholarship will serve the purpose.

On the one hand the aggressive university-trained man or woman who has ideals of what the city training-school ought to do, but who has had little experience in elementary work, is apt to be regarded by the average school principal as visionary and incapable of looking upon actual school conditions with a right judgment of values. The gulf between the two is often too great to admit of mutual confidence and respect. If the majority of the training-school faculty are men and women of this type the school will almost certainly fail to secure the general sympathy and co-operation so essential to enable it to do its most satisfactory work. The serviceableness of the training-school will be very seriously impaired if the principals and teachers of the city are generally inclined to speak of its work in disparaging terms.

On the other hand, the peculiar limitations of the man or woman of successful experience, but of narrow vision and meager scholarship, are too well known to call for extensive comment here. The point of view in this case is a different one, it is true, but the want of perspective is apt to be even greater

than before and is usually combined with much less adaptability and capacity for growth. What is needed, I repeat, is a well-balanced combination of thoro university training, general good sense, and extensive experience in elementary city-school work. This combination is somewhat rare, to be sure, but it should be secured if possible, no matter what it may cost.

What I have said up to this point will doubtless be readily accepted as true provided we may make the assumption upon which it is partially based, namely, that the city training-school should be expanded into an essentially new institution that should undertake the three kinds of work I have suggested. But the propriety of making this assumption may itself be doubted.

In dealing with this aspect of the subject, I shall base the argument chiefly upon two matters of fact: (1) the present and prospective demands upon public education in our American cities which make imperative the more careful selection and better training of teachers and principals; and (2) the peculiar situation of the city training school which makes it possible for it to undertake the scientific study of education under more favorable conditions than can be found elsewhere.

The kind of teacher needed in our public schools, and therefore the manner of her selection and the character of her training, all depend upon the nature and quality of the work which she is expected to do. To ascertain what this work is, it is necessary to inquire what ought to be expected of the city public schools at present, and what important changes in their scope and character the future will likely require. For our present purpose, however, it is not necessary to attempt to treat this question exhaustively. Only certain general tendencies and requirements need to be noted.

In the first place it has been for some time the prevailing tendency to define education in terms of equal opportunity and social efficiency, and to describe the socially efficient individual as one who gives back to society in some form of useful service the equivalent of what he takes from society in the maintenance and enjoyment of his life, who does not interfere with the legitimate efforts of his fellow-men, and who consciously devotes his leisure to further in some legitimate way the progress of society. As a formal statement of the aim of education this is excellent, even if it has been somewhat overworked of late. It makes the individual find his own self-realization not in a selfish end, but in the good of society. It furnishes a movable and adaptable standard which is applicable anywhere, to any kind of society, and at any time. It asserts that no man may be regarded as socially efficient, and therefore as properly educated, who is in any sense a parasite upon society, who makes demands upon his fellow-men for which he renders no equivalent return. It excludes the rich tramp no less than the poor tramp from the ranks of the socially efficient and the properly educated.

This tendency to emphasize the social function of education is significant of the growing consciousness that as a people we are rapidly passing from a frontier, highly individualized state of society to a new and more complex con-

dition of social existence; and that the most crying need of the present is that of modifying and adapting old and persistent individualistic ideas and practices to the new conditions of life in our great, overgrown, and congested American cities. Industrial education, which lately has occupied so much of our thought, is one important aspect of this larger problem.

The recent emphasis upon the notion of social efficiency in education has its chief value, then, in the fact that it sets our thought to work in the right direction. The student of education today must be a student of sociology. Most of the problems that trouble us lie in this direction and are of recent origin. The remarkable industrial and economic development of the last fifty years has thrust upon the educator, as it has upon the statesman, problems of education and of government that both are at present unable to solve. Industrial development, before all else, is setting the pace and marking the course of our civilization. General public education must follow this movement; it cannot be expected to lead it. Perhaps its principal function is rather to economize human energy and suffering in the rapid transitions and adjustments that have to be made. Never before were people called upon to face such complex industrial, economic, and social questions as those which confront us today; and never was there a time when the people in general were more inclined to look to public education for help in the solution of such problems. We may therefore reasonably expect to see very considerable changes in popular education during the next few years if the public schools are to continue to merit the confidence and support of the people.

A brief study of the causes which shall lead to these changes will help to determine what new demands are likely to be made upon the selection and training of teachers.

The two important steps in the complete economic development of a people are adequate production and just distribution. The first of these we have taken, the second we have not, but are trying to take. Up to the beginning, and well on to the middle of the nineteenth century, the world's work was done by the muscles of man and beast. If it was desired to increase the product, the number of mouths to be fed and backs to be clothed were also increased. In other words every increase in production meant a corresponding increase in the demands made upon production. Under such circumstances it was impossible for the world to grow rich and the great problem of society was the problem of poverty.

Thru the application of inventions to steam and electricity all this has been changed. Nature's forces have been made to supplement human muscles and the productive power of the world has been multiplied many fold. The productive efficiency of the United States, at present, is probably double that of the world at the opening of the nineteenth century. Consequently wealth is increasing at a wonderful rate. Many in this audience have seen the total wealth of the United States increased fifteen fold and the per-capita wealth fourfold in their lifetime. According to the treasurer's report of 1850 the total

wealth of the United States was \$7,000,000,000. In 1904 it had grown to \$107,000,000,000 and was at that time greater than the combined wealth of Great Britain and France, next to the United States the richest nations in the world. From 1850 to 1890 the daily increase in the wealth of the United States was \$4,600,000; from 1890 to 1900 it was \$6,400,000; and from 1900 to 1904 it was \$13,000,000 per day. If half this rate of increase is kept up, the wealth of the United States one generation hence, say in 1940, will equal the combined wealth of the world in 1900. Wholly apart from the debilitating influences which luxury may have upon the strength and vigor of a people, this great accumulation of riches evidently places a strain upon the internal moral and social relations of our people.

The problem of society is no longer the problem of poverty, nor is it fundamentally the need of the more rapid and skilful production of wealth; I do not say the latter is not desirable. I am not of those who are inclined to be frightened at the great and rapid accumulation of our national wealth. I am only saying that this question is not fundamental and that from the standpoint of public education it may largely be left to take care of itself. The great problem of the present, on the economic side, is the problem of a wise and just distribution of material wealth, and on the side of public education it is the conservation and more perfect maturing of all that is strongest and best in our national life and character while this distribution is going on.

A glimpse at the economic problem and its bearing upon the possible realization of the foregoing ideal of public education will be instructive.

In ancient times the three great powers of society, wealth, government, and education, were lodged with the few; the many were ignorant and practically enslaved. Society was then in a condition of stable equilibrium. Upon the coming of democracy the power of government was transferred from the few to the many; and in order that democracy might succeed it was necessary that education should also pass over from the few to the masses. But education, by increasing man's knowledge of himself and the world, also increases his wants, his capacity for enjoyment, and therefore his demand for those things which money can buy. Along with this goes inevitably also the ever-growing consciousness that wealth, both in its origin and its nature, is essentially social; it depends upon society and vanishes absolutely if society is individualized or destroyed.

Out of this growing general consciousness of the social nature of wealth springs inevitably the conviction which ultimately ripens into a popular demand, that wealth, the third great power of society, should not be concentrated in a small number of men, but that its benefits also must somehow pass over to the many. If this popular demand is not satisfactorily met there will inevitably exist socially a condition of more or less pronounced popular discontent and social unrest. As a nation we are facing such a condition today. While education and the power of the ballot now reside with the people, wealth in its vast accumulation has become concentrated more and more. There are

several men in the United States who are individually more powerful, because they control more wealth, than any sovereign in the old world; and one trust alone controls more power because it controls more wealth than all the expenditures of the United States government put together in a year. Is there much wonder, then, that men with a clear understanding of the social nature of wealth, who are out of employment and see their wives and children starving in the midst of the greatest abundance the world ever saw, are inclined to strike at the social order which maintains these conditions?

This, then, is the great problem of society at present, a problem that is comparable in importance with the great struggles for religious liberty and popular government. It must be solved; and in due time it will be solved. But whether or not the practical solution, when it is obtained, shall prove to be rational and just and therefore satisfying and permanent, a public education which is itself social in spirit, and which places a right emphasis upon social values and social relations, must largely determine. But when the solution is obtained, no matter how gradually it may come, another problem of education will be made by it increasingly prominent. I mean the problem of leisure.

One obvious result of a juster distribution of wealth would be a shortening of that portion of the day which must be devoted to labor and a corresponding increase in the time which may be given to leisure. But how shall this leisure be spent? As a matter of fact it will be spent in gratifying desires of one sort or another. But what of these desires? If they are of a low order, primitive, unaesthetic, and unethical in character the result can hardly be otherwise than individually and socially degrading. Our great cities are devoting large sums of money to public education, but often they find it necessary to spend quite as much on the various agencies which are designed to keep men and women from using their leisure to the detriment of society.

The situation is complicated also by the fact that in the phenomenal growth of American cities the individualistic ideals, customs, and practices of country life have gone with the people from the country to the city and haven't yet, as a rule, been sufficiently modified to permit of proper adaptation to the new conditions. Consequently, with us, the art of city life and government has yet to be learned.

Unfortunately we may, in general, depend very little upon the educative influence of modern occupations to aid us in this matter. For while modern communication and transportation and world-markets are demanding a broader life, and in themselves are tending to produce more liberal views of society and of the world, occupations have been narrowly specialized and subdivided so that at the very time when in a democracy like ours the demand for liberal culture, many-sided interests, and knowledge of social conditions and needs is greatest, the existing industrial methods tend to reduce these desirable qualifications to a minimum. The grinding, unvarying, monotonous sort of working period which minute subdivision of labor imposes is of very little educational value and must in some way be balanced by a broader social

and spiritual life. As the world's work becomes more exact and narrowing, the leisure of life, and especially the part which may be devoted to education, must be utilized to bring the necessary variety and breadth of experience which personal happiness, general good-will and intelligent co-operation require.

That we may not depend upon the home life of the modern city to give much assistance in this direction is also a fact too well known to call for comment. It is patent to all that the home as an educative institution, in the sense that many of us enjoyed and profited by in our childhood, is out of the question in the great city of today. Not only are the occupations gone in which the child could formerly participate with great profit to himself, but woman herself is also tending at present to follow these occupations out of the home into the business world. One-seventh of the adult female population of our cities already belongs to the wage-earning classes. This fact tends to lessen the educative value of the home in another and more serious direction. For this reason the influence of the best, most intelligent and refined women that can be had is needed more than ever before in the lower grades of our public schools.

I have thus indicated briefly some of the questions that confront the great city today. The catalog is incomplete, to be sure, but I have not aimed at completeness. My purpose, as you will recall, was simply to point out in a general way the place which public education must come to occupy among the great forces which affect the progress of society; and to discover as far as possible what new demands are likely to be made upon city education and consequently upon the selection and training of teachers.

What then are the conclusions to which we are led? Let me state them as briefly as possible. First of all it is, I think, perfectly clear that our cities will, as time passes, make increasing demands upon their public schools. For they must now look to the schools not only to supply, so far as they can, a sort of training that was once afforded by the home and the occupations of the people; but also to furnish a kind of education that is more perfectly adapted to meet the new industrial and social conditions to which I have referred. Already the past few years have seen many new kinds of service undertaken by the public schools in some of our cities, and the future will undoubtedly add others to the list.

It is evident therefore that the city-school system cannot undertake a more important work than the training of teachers. It is also evident that the time required for this purpose must somehow be extended, and the work itself more efficiently done. Better methods of instruction, greater practical skill in teaching and class-management, thoro and accurate knowledge of all the subjects that make up the curriculum, and the ability to see the whole course of study in proper perspective and with a right judgment of values, are all of course extremely important. But owing to the great variety of subjects now included in the grades and also to the fact that the training school is generally expected to prepare the students to teach in any grade below the

high school, this aspect of the general preparation of teachers requires more time than is at present usually allotted to it.

Again, certain other qualifications that are equally desirable under present conditions need to be more strongly emphasized. Among these I would mention first, the spirit and personal power of the teacher. These are mainly silent but extremely potent influences which are always at work on the life of the child. They are largely dependent, of course, on the good health and natural attractiveness of the teacher and are therefore, for the most part, beyond the control of the city training-school except in the exercise of its selective function. For this reason the training-school should be left absolutely free in the exercise of this right to select, both in accepting or rejecting applicants who have the nominal qualification required for admission, and also in dropping them after they have been admitted, when in the judgment of the faculty it is best for the schools that this should be done.

But in so far as the spirit of the teacher comes from a clear consciousness of the meaning of life and of the far-reaching social significance of the work she is doing, and in so far as it expresses itself in her attitude toward those for whom and with whom she must work and in her desire to count for something in the life of the world, it is to a very considerable extent under the control of the training-school. Such a spirit comes in part, of course, from the intellectual grasp of the moral and social meanings and values of public-school work which the teacher is able to secure thru the help of the training-school. It is derived even more, however, from close personal touch with the members of the faculty and from continually absorbing that spirit of honesty and of service for the very joy of it, that should pervade the whole atmosphere of the training-school from the principal even to the janitor.

Scarcely anything can be more important than that such a spirit as this should be made to characterize every school and every schoolroom in the city. It means more for society than any lessons learned from the course of study. It is, as I have said, a silent force that is always at work on the life of the child, an influence that abides and affects profoundly his subsequent attitude toward his fellowmen and his judgment as to what is worth while in the life of the world. Recent developments in the psychology of imitation reveal to us the remarkable extent to which this is true. On the other hand, certainly nothing could be more detrimental to social efficiency of the school than that the child should encounter there, as he too often does at home, that other spirit which is characterized by the effort, organized or unorganized, to do as little as possible and compel society to pay for it as much as possible.

Another much-needed qualification is adaptability. I have already said that one of the principal functions of public education is to economize human energy and suffering in the rapid transitions and adjustments that now-a-days have to be made. But if the public school is to be a satisfactory instrument of adaptation it must itself be adaptable. It is of course naturally and properly conservative, but it must not be too conservative. Someone has said that the

public-school system, in its relation to industrial and social development, is like a freight car hitched to a locomotive by an elastic coupling. During periods of great prosperity society pulls away from its schools and must then come to a pause before the latter can catch up. The cause of this lack of adaptability on the part of the schools lies chiefly in the fact that the teacher, thru long-continued service in the same grade and room and perhaps under the same supervision, becomes so completely adapted to this narrow environment that she does her work almost automatically. She loses interest in many other things, meets no new conditions which require thought, and in time comes to regard any new demand as an unjustifiable hardship. When this condition is reached mental growth and adaptability are practically impossible.

If this result is to be avoided provision must be made to encourage further general and professional study on the part of teachers after their appointment. This duty naturally devolves upon the city training-school and calls for the organization of a department which shall offer courses to be given after school hours, and on Saturdays during the school year, and in a special summer school. This work should be so planned as to set before the teacher a definite and desirable objective and should be offered entirely under the direction and control of the training-school, or college of education, as I prefer to call it. None of it should be made compulsory, nor should the teacher be encouraged to take it by any definite promise of promotion or increase in salary. Whether it shall or shall not be taken should be left in every case to the voluntary choice of the teacher.

The courses offered in any subject should be so grouped as to give, when taken together, a certain unity and system in the treatment of it. If the completion of a group should require certain courses which cannot be given by the faculty of the college, these courses should be offered in the summer school and given by someone either within the school system or out of it, who may be especially well qualified for this purpose.

All subjects in which courses are offered should bear more or less directly upon some phase of city education. The satisfactory completion of any group of courses should carry with it a certain amount of credit toward a college or university degree, to be determined by the nature of the courses which compose the group. By this arrangement teachers would be given an opportunity to work toward the attainment of a college degree without the necessity of discontinuing their teaching, except for a final year or two's leave of absence at some university. The way would thus also be opened for teachers in the elementary grades to look forward to the possible attainment of a high-school position if they so desire.

In planning the work of this department the interests of high-school teachers and elementary-school principals should also be provided for. Both of these classes of men and women are subjected to certain conditions which, as such, are not conducive to further growth. The high-school teacher, as a rule, devotes most of his time to the study and teaching of a single subject and often

to a year or even a half-year of that subject as outlined in the course of study. Moreover he is constantly dealing with minds less mature than this own.

This latter statement is also true of the grammar-school principal. In his own little world his will is supreme; and his judgment, law. He usually is, and ought to be, held responsible for the work of his school, and should be given liberty which is commensurate with this responsibility. He is therefore an exceedingly important factor in city education, the man "behind the gun," as it were. But, unfortunately, in such an environment, he loses the stimulus and the profit which come from the frequent clashing of equal minds, and after a time may even become the most rigid and least adaptable element in his entire school.

It is obvious then that the courses which are planned for principals should be mainly of the seminar type. The professor in charge should confine himself chiefly to outlining the course, assigning the work, presiding at the meetings and stimulating the discussions. The papers, as a rule, should be prepared, read, and freely discussed by the principals themselves.

Such work as this is also of great profit to the college itself, for it keeps the faculty in close touch with those who are vitally interested in the work of its training department. It brings about a mutual respect between the principals and the faculty, and by placing a proper emphasis upon the practical aspect of the training of teachers, gives to this work the sanity and balance which it ought to have. Indeed, whatever may be done to bring about a hearty co-operation in the training of teachers, between the faculty of the college and the principals of the schools, should, in general, be warmly commended.

After three years of careful study of the St. Louis plan which makes certain principals of the city, in reality, members of the faculty of the Teachers College, and holds them responsible for a large part of the observation and practice training of the students of the college, I am convinced that it is a most excellent plan in almost every respect. On the whole, I am inclined to believe that the best possible division of the usual two years' course which is given to the initial preparation of teachers would be as follows: one year under the local faculty of the college; one-half year of observation and practice in all the grades of certain grammar schools chosen for this purpose and having not more than four students assigned to each school; and a final half-year at the college. The practice half-year should, of course, be properly supervised, and thruout the whole course theory and practice should be vitally related.

I come now to speak a few words in closing, concerning the third important function of the city training-school—namely, the scientific study of education, especially of the problems of city-school teaching and administration. There is, it seems to me, every reason why this study should be undertaken and no valid reason why it should not. In the first place the city training-school has a more vital contact with actual school conditions than any other existing institution; every type of city-school problem is concretely and directly accessible to it. Furthermore, it is the only agency within the city-school system that can

devote to such problems the careful and detailed study which their solution requires. The superintendent of schools in our larger cities is coming to be largely an administrative officer, who must, of course, see the larger questions of administration and instruction but cannot be expected to give the close expert and detailed study which the minor problems require. Therefore, the city training-school can and ought to be equipped to assist the city superintendent in this important work and to this end it should be able to command the services of the best educational experts that the country affords. The city training-school has indeed a unique opportunity to advance the interests of education at large and should not any longer be allowed to shirk the responsibility which this opportunity imposes upon it.

ROUND TABLES

ROUND TABLE OF STATE AND COUNTY SUPERINTENDENTS

TOPIC: IS THE EMPLOYMENT OF UNTRAINED TEACHERS THE CAUSE OR RESULT OF LOW SALARIES?

I

DAVID FELMLEY, PRESIDENT, STATE NORMAL UNIVERSITY, NORMAL, ILL.

There are concomitant phenomena in physical science, in biology, and in social life so reciprocally related that it is often difficult to tell which is cause, which is result. Any increment of one is accompanied by an increment of the other.

Has the strongest weed in the patch become such by having more than its share of air and sunlight? Or did it overtop the others in the struggle for sunshine because it was at the start the strongest?

Is drunkenness the cause of misery, or misery the cause of drunkenness?

Is a morbid mind the cause or result of certain pathological conditions?

The question before us seems to belong to the same class.

Surely when wages are low few will go to the expense of professional training. It seems equally clear that when untrained teachers are acceptable, the abundant supply will keep wages at the general level paid to unskilled labor.

There is no profit in discussing the question unless we can find a way out of the circle.

At the outset of this discussion let us consider the present conditions of supply and demand as affecting salaries. Most of the teachers of the United States are young women drawn from what are sometimes called middle-class families. Such families are the staunchest supporters of our public schools. Their girls attend regularly and unless of poor health or with a marked disinclination to study press on thru the high school. At graduation the young lady is eighteen. Her assistance is not needed in the work of the household. She feels that she ought to do something toward her own support. Her associates have been schoolgirls and teachers; she knows comparatively little of employments outside the school. She is fond of books and of school life. She resolves to become a teacher. She has little difficulty with the county superintendent's examination. She is willing to accept almost any salary, which while she is living with her parents will suffice for her personal expenses. So long as school boards are willing to employ these fresh graduates of the home school, who are expecting only a few years of teaching before marriage, there will always be a large supply available at low salaries. Those who fail of early marriage, or are soon brought to the necessity of complete self-support, largely abandon teaching to

become bookkeepers, responsible saleswomen, expert stenographers and secretaries, or trained nurses. Under these conditions salaries become low and stay low. If they are raised, it is not in accordance with business principles, i. e., with the law of supply and demand. It is rather in accordance with what we may call political principles, the cause that operates in raising the salary of aldermen, congressmen, and presidents. Teachers' positions soon come to be regarded as political plums, to be obtained by pulls and influence. The supply of candidates exceeds the demand. In the case of public office, when the salary is excessive in view of the qualifications required and labors, responsibilities, and vexations which the office entails, public-spirited men who would seek the office as an opportunity for public service disappear from the field, leaving it to the self-seeking and mercenary. Similarly, if teachers' salaries are raised without requiring better qualifications, we simply attract to the ranks a class of teachers who love the salary more than the work.

But suppose without raising salaries employers demand better qualifications. This means that the high-school graduate must spend one or more years in normal school or college usually away from home. Some cannot afford the outlay, some will not afford the time and money. Of the girls described above, only a few who are strongly attracted to teaching and can afford the expense will obtain the training required. Consequently, except in the immediate vicinity of state normal schools and other institutions that train teachers, the supply of teachers will not meet the demand.

If this analysis is correct the only way out is thru simultaneous legislation, raising salaries and the standard of qualifications.

In practice, it may be necessary to adopt a salary schedule based upon professional preparation; or even to enforce the requirements of professional preparation rather leniently until a body of trained teachers is produced. Better wages at once will start young people to the training schools and will also enable our present corps of teachers to take time off for further preparation. It will check the outflow of promising teachers who see in the profession little prospect of satisfactory income.

A few years ago I attended a school officers' meeting in Piatt County. "Teachers' Salaries" was the question for discussion. Nearly all the school officers present (and the meeting was well attended) spoke on the question. There was complete unanimity of opinion to the effect that teachers' wages in Piatt County should be at least \$10.00 a month higher all around. But the meeting was almost equally unanimous in believing that the present teachers were getting all that they were worth. The county superintendent declared it was useless to raise qualifications without better salaries, because in that year he had refused certificates to only two candidates while two years before he had refused forty-three. He was obliged to level his examinations to the qualifications of existing candidates. Consequently the opinion prevailed that wages should be put up at once, for without such raise in wages young people could not be induced to prepare for better teaching nor could the existing body of teachers afford to go to summer schools or adopt other means of professional improvement. Several years ago a minimum-salary law was adopted in Indiana providing minimum salaries proportionately to the credit upon the certificate. It was hoped that the increased pay for better prepared teachers would produce sufficient improvement in their quality. But the law favored better academic scholarship rather than better professional preparation. As a consequence it could not be seen that the improvement in the quality of teachers was commensurate with the increase in salaries. Accordingly, two years ago the law was amended by inserting a requirement for a term of attendance upon some professional school.

II

V. L. ROY, SUPERINTENDENT OF SCHOOLS, PARISH OF AVOYELLES, MARKSVILLE, LA.

This question assumes not only that there is an immediate connection between the salary and the efficiency of a teacher, but also apparently that the sole cause or result of low salaries is to be found in the employment of untrained teachers. But it requires brief

consideration of our subject to discover that there are other causes for the low salaries too often paid our teachers. Among such causes may be mentioned the relative wealth or poverty of a district, county, or state; the want of a progressive spirit among district and county boards in some quarters; and the failure on the part of parents fully to appreciate the worth of an education. For instance, we may reasonably expect that the rich farming sections of Illinois or the wealth of our large cities will better remunerate their teachers than certain parts of our Southland or of the West, where the amount of property per inhabitant is small. This assumption is based upon all other quantities in the equation being equal.

We must also concede that, even if we assume low salaries to be a result of the employment of untrained teachers, they cannot be the sole result of the presence of such teachers in our schools. We may argue, for instance, that low salaries place a damper upon the efficiency of all teachers, whether trained or not; that such salaries thwart the growth of teachers; and that they tend to paralyze the whole system.

The business of employing teachers is not exempt from the law of competition. First, among school boards or other agencies employing teachers, there is often a lively competition. With increased and better means of travel, teachers do not object to employment in places very remote from their homes; in fact, today many do not hesitate to take up work in distant states. Thru the writing of many letters, the applicant succeeds very effectually in emphasizing this competition to his own advantage. But such competition extends beyond this narrow sphere; for it frequently sets the school board against the business house, the bank, and certain crafts. If with less training than is required of a teacher, obtained at a smaller outlay of time and money, the young woman can fill a position as clerk or stenographer at the same salary as the teacher, she will gravitate in the direction of the store or the office. When low salaries persist in a state or section, men and women leave school work because other lines may offer better pay. The result of all this is to reduce the number of men and women devoted to the education of our youth. Continued low salary commands poorer and poorer service; and low salaries again become a direct cause of inefficiency in the schools.

The above are immediate effects of low salary, but it operates in other ways, which, tho perhaps less direct, are not less effective in bringing into the teacher's calling untrained material. When the young man or woman who is pursuing a course at college or at the normal school casts about to choose his life work, he is attracted to teaching or repelled from it, other things being equal, according as to whether salaries are relatively high or low. If salaries are low, the schools suffer in two ways: First, the supply of prospective teachers is reduced, and the law of supply and demand operates. Teachers being scarce, either salaries must rise or school boards must not be too exacting in their requirements. The first alternative works to keep salaries from falling below a certain minimum; the other, to admit into our schools a class of young persons wholly unprepared for the important work of the teacher. Second, the expectation of a low salary by those who determine to teach puts a discount on proper preparation. While in such cases there may be a measure of training, it often proves wholly inadequate.

Aside from the tendency of low salaries to reduce the amount of training in teachers in the manner already indicated, the same result obtains in another direction. The most efficient means at the command of school authorities for keeping up a progressive spirit among the great body of teachers, and for training the young teacher, lies in our great system of summer normal schools, state institutes, county institutes and association meetings, and state conventions of teachers. Along with this comes attendance at higher institutions during the summer vacation or during the school year on leaves of absence. Ordinarily there is no lack of a desire on the part of our teachers to secure the training offered by such institutions; but low salaries are a fruitful cause of the failure of many teachers to get the training. After paying for board, clothing, and other necessary expenses during the year, they find themselves wholly unable to take advantage of the summer training school.

Mainly, therefore, in four ways low salaries result in the employment of untrained teachers: First, because quality of service bears a direct ratio to remuneration in any line of activity; second, because competition exists among school boards and between school boards and other agencies employing the services of men and women; third, by failing to offer the prospective teacher such inducements as will enable him and urge him to secure a proper training before entering the schools; and, lastly, by not providing for the well-meaning but untrained teacher already in the service sufficient financial means to take advantage of training schools and gatherings provided for teachers.

I have also examined the other side of the query, and have attempted to determine in what ways, if any, the amount of salary is affected by the teachers' training.

In any system of schools, whether county or state, where the average teacher may be said to be untrained, there can be no doubt that such lack of training exerts an influence to keep salaries low, or to keep salaries from a natural increase. And it does this in several ways or thru several channels. First, it operates thru the patrons of the schools. The untrained teacher being less efficient, other things being equal, than the untrained teacher, there cannot be that demand on the part of patrons for increased remuneration for the teacher's service that there would be in the case of the trained and competent teacher. No experience is more certain than that the efficiently trained teacher, operating thru the patrons, tends to raise salaries; nor that the poor teacher fails to create a demand on the part of the parent for better salary. Any salary, the patron justly says, is large enough for such a teacher.

A body of untrained teachers will lack the initiative and the spirit essential for success in any demands for increased salary. Lacking the consciousness that better service alone can command better salaries, they likewise lack the conviction that there is any justice in their petition for better wages; and hence they fail to create the sentiment for the better remuneration of teachers.

I take it then, that primarily the employment of untrained teachers is a result of low salaries; but that, in a secondary manner, the employment of such teachers is also a cause of the generally low salaries paid teachers thruout our country.

*TOPIC: THE REORGANIZATION OF THE LIBRARY OF THE
BUREAU OF EDUCATION WITH A VIEW TO MAKING IT
AN AGENCY FOR EFFECTIVE CO-OPERATION WITH
PEDAGOGICAL LIBRARIES THRUOUT THE COUNTRY*

ELMER ELLSWORTH BROWN, UNITED STATES COMMISSIONER OF EDUCATION,
WASHINGTON, D. C.

I can best present this subject in the form of a memorandum prepared by Mr. William Dawson Johnston, the present librarian of the Bureau of Education. Mr. Johnston, since he assumed the direction of this library, on September 1, 1907, has accomplished one of the most notable performances in library reorganization which are recorded in our educational history. The collection has been stripped to an effective working basis by the transfer to other libraries of upward of 58,000 pieces, including more than 23,000 bound volumes. The remaining collection, more than 62,000 bound volumes and nearly 150,000 pieces in all, has been put into shape for wide and convenient use, its cataloging has been carried forward and largely assimilated with that of the Library of Congress, the bibliographical service has been extended, arrangements have been perfected for the preparation of catalog cards in education to be printed by the Library of Congress, and so made available for the use of libraries everywhere, and the classification and binding of documentary materials, serials, and other pamphlets has been rapidly advanced.

There have been distributed for your examination copies of the bulletin of the Library of Congress giving an account of the printed catalog cards in education which are now

offered under the arrangement which I have mentioned, and a select bibliography of the feeding of school children, which is presented as a sample of the current bibliographical service.

The memorandum of the librarian is as follows:

From the point of view of the librarian the work of the library is fundamental. Our first task is to find out what educational information already exists in books and periodicals, and make it more available. This involves (1) the collection of a comprehensive pedagogical library in the Bureau and the building-up of good libraries in every center of research; (2) the proper cataloging of these collections; (3) and the publication of bibliographies. I have discussed these forms of service in my report as librarian of the Bureau for the year ended June 30, 1908, and in an article in the December number of the *Educational Review*. I may be allowed here to recapitulate what I have said at greater length in those places.

While the library of the Bureau, like other pedagogical libraries, must secure all the important current literature of education, its distinctive task is to collect works which are not to be found in other collections—voluminous serial publications which few institutions can afford either to purchase or shelve, precious educational incunabula, and rare educational pamphlets.

Material of this character should obviously be preserved in the library for reference purposes only, but other works in the collection may be lent upon the usual terms of inter-library loans. I attach less importance, however, to its function as a circulating library than to its function as a clearing-house for the exchange and distribution of educational literature. The building-up of good pedagogical libraries in the different centers of research thruout the country is as important as the collection of a great pedagogical library in Washington. The Bureau library may assist in this by completing important sets of documents well-nigh useless because of their fragmentary condition, by distributing privately printed monographs, and in many other ways. More important still, it may publish full information with regard to current publications relating to education. Without such information the intelligent development of our pedagogical collections is impossible; with it their development will become not only intelligent but rapid. Librarians collect more readily the literature which is best described and indexed, partly because it is easier to collect it, and partly because it may be made more useful.

The bibliographical service of the library will involve making known what is in the library by any author or on any subject. This is done by printing the catalog cards and distributing them to certain depository libraries which undertake to preserve and file them, and to such institutions and individuals as may subscribe for them. The bibliographical service will also involve the collection of information as to what educational literature exists in other libraries, incorporating this information in a union catalog of pedagogical libraries, and publishing the most useful parts of it in the form of union lists. It will comprehend, too, the indexing of sets of serials. These catalogs, lists, and indexes will aim at completeness of information regarding the book or class of books described.

Other bibliographies, however, will aim to record simply the most important literature of a subject. The annual bibliography of education, for example, will describe only the best books and articles on education which have been published during the year, and the reference lists sent out in either printed or manuscript form will include only the most important old or recent works relating to the subject of the list.

In this bibliographical activity European nations are far ahead of us. The collections of the Musée Pédagogique far surpass ours, and such bibliographical records as are prepared in the Italian Ministry of Public Instruction and in the Zentralstelle für Dissertationen und Programme at Leipsic are utterly out of the question with our small staff. If our collections are to be made as valuable as the great European collections, our book fund, which is at present only \$500, should be increased at once, and if our bibliographical records are to be made as useful as theirs, our library staff, which now numbers nine, must be enlarged two or three times.

The objects of the service of the library to state and city superintendents may be summed up briefly as follows: (1) To collect and make accessible all laws, reports, and other publications issued by state or city authorities or of interest to them; (2) to issue lists of these publications in book and card form with a view to making them better known and more useful; (3) to answer any questions presented by letter or otherwise regarding publications of these offices or of interest to them.

In fine, as the plan of the statistical division of the Bureau is to be a clearing-house of statistical information, so the plan of the library division is to become a center of bibliographical information, especially regarding the most recent publications of value to school officers.

ROUND TABLE OF SUPERINTENDENTS OF SMALLER CITIES

TOPIC: INDUSTRIAL EDUCATION

O. I. WOODLEY, SUPERINTENDENT OF SCHOOLS, PASSAIC, N. J.

One of the chief functions of the school is to explain and interpret the civilization in which we live. It is important that pupils be led to understand the ideals of the present civilization and life, so that they will do the things and live the life that contribute to individual and national growth and prosperity. It follows, therefore, that the present civilization should determine and govern the curriculum of our schools. The past had its civilization and its schools, and some of this civilization and some of the instruction of the schools is still of value and therefore is retained as part of the present life and instruction.

The chief purpose in studying the civilization of the past is to secure material with which to compare and determine the true worth of the civilization of the present. Another reason for studying the past is to discover what is permanent in national and individual life and what things are only of local and temporary interest and importance. A third reason is to learn the laws that govern the development of the individual and the state, and to ascertain the general tendency of government.

If all this were better understood, it would lead to such a modification of our curriculum as would give more emphasis to the present, using from the past only those contributions which have present value. The correct interpretation of the present and its tendencies is, then, of vital importance, and is really one of the fundamental questions of education. The terms "education by adjustment," "social efficiency," "character," and other stated educational ends have no special content until there is a clear understanding of the values of the various units by which our civilization is measured.

In the primitive life of the American Indian, the question of subject-matter of a child's education was a comparatively simple one to solve. The simple mode of living made each tribe, in a sense, independent. The demands upon the individual were few, and these he learned to meet almost without conscious effort during a childhood which had ample opportunity to observe everything connected with Indian life.

Every advance in civilization has added to the interdependence of man, and has thus increased the difficulties of the schools by making necessary the introduction of subject-matter outside of the experience of the pupils. This interdependence has become so great that it is now impossible for one to know thru experience everything that enters into modern life. Many important things cannot be learned thru normal childhood experience and hence must be learned in other ways. This fact explains the necessity for the modern school, with its overcrowded curriculum which requires years to complete.

If the theses which I have already stated are accepted, then another, which is a corollary of these, must also be accepted. The relative importance of the various subjects in the curriculum should be determined by the amount which they contribute to the correct inter-

pretation of modern life. All subjects that do not contribute largely to this end should have no place in the overcrowded curriculum of today. If all sentiment could be laid aside, and the subject-matter be determined by this thesis and by the new psychology, the schools would more fully justify their cost.

If the present civilization were more generally understood, and if there were more uniform conceptions of its requirements, there would exist a more homogeneous people and a more uniform and active spirit of nationalism than is now the case. If this condition could be secured, the civic, social, and industrial units would be standardized; and people in all stations would live more contentedly and harmoniously than they do now with their widely different views and their different conceptions of values. The proper appreciation of social, industrial, and political units of value is of primary importance; and, in my judgment, should be one of the *constant* elements in all phases of life and educational work. If these units were made standard in the school curriculum it would contribute more directly to the unity, prosperity, and progress of the state.

The early years of school life should be devoted to the consideration of those subjects that will enable students to understand and appreciate in some measure the units of modern civilization, that they may be prepared to take their places in the home and community life. This foundation equipment is also a necessary preparation for all vocations. A large percentage of pupils leave school before reaching the seventh grade in order to begin the inevitable struggle for a livelihood. They usually become the laborers, the operatives, the servants, and the underpaid clerks. If they have gained some understanding of the units of modern civilization and some appreciation of the essentials of manhood and womanhood, life to them need not be the cheerless and hopeless existence which it too often is to those engaged in menial employment.

To the schools we must look to give much of this preparation, and if they meet our expectation by rendering this important service, they will be a great influence in furthering national unity. If, however, they determine growth solely by objective tests, ignoring subjective results in the individual, they will continue to fail at a vital point. Where pupils are obliged to leave school before they have received this important preparation for life, supplementary evening schools should be provided which would have for their main purpose the consideration of the life of the people as it manifests itself outside working hours. These special schools would be concerned with man as a citizen, as a husband, as a father, rather than as a bread-winner.

There comes a time when the individual must leave school and enter upon a life-work. For those who enter upon this life-work at an early age the organization of society is such that the majority will continue upon the same industrial and social plane as that upon which they begin. Comparatively few rise above it. Those who leave school early should understand this, and should also recognize the fact that the doors to professional life and responsible industrial positions will be closed to them.

From the pupils who continue into the upper grades and the high school there must come all of the professional men and the great political, civic, and industrial leaders of the country. These years of school life, therefore, become the choosing period—the time of selecting a life-work. At this stage of growth and progress, young people should have sufficient knowledge of themselves and of life to give intelligent consideration to this momentous problem. If they do not have sufficient data to do this intelligently, the schools have failed to present important subject-matter. A close study of the modern curriculum shows that it still contains much from the past that is of present use as well as some things that are of little value.

In the past the vocation of an individual was in a measure determined by the conditions into which he was born; but at the present time each person is usually free to choose for himself. In order to meet the requirements of the complex civilization of today, this choosing of a vocation becomes a most vital and perplexing question.

Personally, I regard the seventh and eighth grades as the most critical period for

here boys and girls must choose either to enter high school or to go out into uncertain work. In order to help them in this choice, they should be given much specific information about vocations and the special requirements for their successful prosecution.

At this choosing period, it is essential that teachers should have a wide outlook upon life, broad scholarship, and an abundance of genuine human sympathy. Academic or objective tests should be secondary to subjective tests, or what the individual reveals of himself. An entire life should not be put in jeopardy by a percentage mark. During this sensitive period, teachers should have the advice and encouragement of principals and superintendents who can supplement their scholarship with sympathy so that all, working together for the boys and girls, may develop hopes, arouse ambition, and create active desires for useful and serviceable lives.

The school man should know the specific demands of the different vocations much better than he usually does. If educational leaders gave more attention to the requirements of our professional and industrial life and less to abstract psychology and theoretical pedagogy, they could render more practical service. The schools would be more effective, and would merit even in larger degree than now the support and confidence of the citizens.

It would be helpful if pupils at the critical period could have vocational life presented to them by persons representing the different vocations. The doctor, the lawyer, the merchant, the manufacturer, and others can give very much valuable and useful information, drawn from their own experiences, that would be of great value to those who are undecided about their life plans. They can present the advantages and disadvantages of their work, the kind of preparation required, and the kind of personality likely to be successful. We are giving such a course of lectures in our high school this term, and it promises to be of great value to both teachers and students. Each speaker gives two lectures. In the first one he presents the positive or attractive side of his work and in the second the negative or unattractive side, with a summary of the personal elements necessary to insure success. This information will enable the young people to give the matter of a vocation more intelligent consideration than would otherwise be possible.

The pupils of the grades below the high school have four possible courses to consider: they may leave school and begin to earn a livelihood; they may enter the high school and take an academic course with no special motive but that of graduating; they may decide to pursue a course that leads to professional life; or they may choose that which leads to an industrial vocation. Having determined upon the general vocational course, the student should have every opportunity for its continuous prosecution.

In all courses, however there should be two common elements and the distinctive vocational element. The first common element includes those subjects that prepare for political, social, and community service. The second is a study of the material world thru some form of constructive manual work. Manual training in part supplies this element. If it were richer in information it would satisfy it entirely. The information which comes thru manual work is just as important and vital as that which comes thru history and science, and therefore this subject should be continued as an informational and interpretative subject in all courses. If it is continued, it will more and more become a means of establishing kinship between different classes. Manual training is, in a way, a link between the industrial and academic or professional courses, and this link should not be broken.

For the professional and commercial vocations the high school should provide those subjects that will lead to special college and professional courses. This is of particular importance in those states in which the colleges require an academic degree for admission to the professional courses. Twenty years is a long time to give to preparing for a vocation which, in the average case, does not continue much longer than the period of preparation. If the high school can help to shorten this period, a practical service will have been rendered.

The industries which are to receive special emphasis should be determined by each community, and there may be communities where there is no demand for industrial work

outside of manual training which, in some form, should be taught in all schools. Such cities are of course residential suburbs. In these any special demand for industrial work can be provided in the special schools of the greater city near.

In much the same way as the subject-matter of the school is drawn from the civilization, the nature and character of the industrial school should be drawn from the local industrial life. In a mining city, the industrial school should prepare for those positions in the mine that require intelligence and skilled labor. For example, the industrial work of the high school at Calumet, Mich., is determined in large part by the copper mines there. The work represents the mining requirements so completely that boys clearly perceive the value and importance of each step and eagerly strive to master the difficulties. Even from the high school, they go well prepared for responsible and efficient service at a good wage.

The condition or situation is now fairly before us as expressed in terms of demand and also in terms of the inadequate provisions for meeting it. In the past children had a share in the actual work of the home. Boys shared in the occupations of the father and thus gained concrete experience by which to interpret the instruction unconsciously but positively given in the home life and environment. Today conditions are different. Children have little material experience by which to interpret the work of the school, and thus much of it is abstract and unintelligible to them, because dissociated from actual experience.

When it is remembered that the real stability and wealth of a state or nation depend upon its ability to produce useful and finished material things, and that our educational system does not in any adequate way prepare for such production, we may well give consideration to the question of industrial education. Shall we depend upon men brought from foreign countries to do our industrial work or shall we give such instruction as will provide for its being done by the intelligent and trained workmen of our own country? Shall American brains and industry produce the great variety of products which are possible and for which we are already famous thruout the world? The demand for skilled labor is urgent and imperative. The home life cannot meet it. The schools could if they were reorganized so as to make the meeting of this demand a positive aim. This should be done, no matter what the effect is upon educational creeds and theories, or the theoretical opinions uttered by men who have gathered their knowledge of material things and of industrial life, not first-hand by direct contact with them, but from fireside investigations of figures furnished by statisticians.

When provisions have been made for instruction that will prepare for citizenship and develop useful manhood and womanhood, then provision must be made for instruction that will fit one for a vocation.

Having decided to give special attention to vocational work in the high school, we must lay aside our educational conventions and the old faculty psychology, and with these, some of the things for which they have been responsible. We must recognize that intensive vocational study and work are as positive in making moral and intellectual fiber as any other studies in the course, and that they are also as positive in producing real culture and manhood as any of the subjects that were pursued in the schools of the past. Fully believing this, I am convinced that approximately one-half of the time of the high-school course should be given to vocational preparation rather than to learning those subjects which are continued because of sentiment or because of a wrong conception of values.

To determine what the vocational subjects should be and to ascertain what portions of these subjects should be considered, we must go to representative men of these vocations for advice and assistance. Realizing this, I am holding a series of conferences with groups of men representing the various professions and industries. I am meeting the doctors, the lawyers, the manufacturers, the engineers, the merchants, and other groups separately in order to discuss education with them in terms of their own experiences. I am trying to come to some agreement with them upon certain educational propositions and to this end I am conferring with them in order to ascertain their point of view regarding the proper preparation to meet the demands of the present civilization. The pro-

professional leaders and the industrial leaders must help us. We should be willing to let some things go in order to make room for what these practical men recommend. The present, not the past civilization, the practical demands of present life, rather than the dictations of the colleges and universities, must determine the course of study for our schools. The high school must have an added motive. To its diploma and to the university and college-entrance requirement must be added an active purpose to prepare for citizenship and vocational duties. This motive is reasonable, the demand is urgent, and school workers and students should give it first consideration. If this is done, the bread-winner of every vocation, and the schools of every rank, will work together to produce a more homogeneous and loyal citizenship, and thus contribute to the happiness of the people and to the development and perpetuity of the State.

I. CONDITIONS WHICH DEMAND INDUSTRIAL TRAINING IN ELEMENTARY SCHOOLS

A. C. THOMPSON, SUPERINTENDENT OF SCHOOLS, AUBURN, N. Y.

[An Abstract]

Plans for reorganizing the school system from top to bottom so as to lay a more practical foundation for the industrial life in which the great majority of pupils will find their vocation are everywhere in the air.

Formerly, when a substantial part of our population was in the country, boys received instruction in nearly every trade that contributed any article needed in the home or about the farm. President G. Stanley Hall says that boys brought up on a farm a generation ago were taught the rudiments of at least seventy trades.

Now a large majority of the children live in cities and villages. Few of them are given any responsibilities or duties to perform at home; consequently in the interest of industrial progress it is clearly the duty of the school to give a manual education which shall be most effective to this end, and since a very large percentage of the children never reach the high school this education must begin in the elementary grades.

Vocational or educational.—Shall the general aim of our industrial training be to teach the essential elements of all manual occupations, or to teach expertness in one special manual dexterity or trade? Is it the business of the school to teach the pupil how to make the one-hundredth part of a shoe during eight hours of the day, or to teach him how to live the other sixteen hours? This is the question squarely put.

Before we abandon the wisdom of experience in order to embrace some new form of education let us be sure that the new will tend to make a man at the same time that it trains a mechanic. In this rapidly changing age trades and machines become obsolete in a generation. After these have passed the man lives on.

The most practical industrial education, in my opinion, is that which will teach children to think and make them versatile so that they will be able to adjust themselves to a changing environment. Any form of education, whose chief aim is to teach trades at the sacrifice of academic work, will be disappointing in its results. Of this I have no doubt.

The child.—We must remember in planning the industrial course for grammar grades that it must be adapted to children fourteen years old and younger. Children of this age cannot tell what vocations they will follow, and neither their parents nor anyone else can decide for them. In many foreign countries the child follows the vocation of his parent naturally and without question. In this country it is the exception for the boy to pursue the father's trade.

I presume that thruout this country not over 1 per cent. of children in the elementary grades will follow the vocations they might choose today.

Again the needs and natural development of the child must be considered. Children use the larger muscle groups earlier than those concerned in finely adjusted movements. To attempt the teaching of a special dexterity or trade to young children might result in a

specialization of the smaller nerve and muscle centers long before their natural time of development and render the teaching ineffective.

The course.—An important element in determining the character of our industrial education should be the demand of the industrial world. In all industrial pursuits the real demand is for efficient workmen capable of planning and inventing new designs and devices.

At the present time in the public schools of my city there is a very complete course in manual training for both boys and girls of the first nine grades. This work is directed by two supervisors and three supervising teachers. The aim of our course is not to teach a trade or special dexterity but to teach the dexterities which underlie all manual pursuits. This is accomplished by teaching means of expression thru the education of the hand in producing useful articles from coarse fibers, yarns, cardboard, wood, venetian iron, etc., and later by teaching the girls domestic science and art and the boys the proper use of fifty or more hand tools, requiring a high degree of muscular control, in making such useful articles as the pen-holder, hat-rack, bread-board, tabouret, etc.

This kind of work, in my opinion, is the best industrial training for grammar grades. It quickens ability in self-expression and power of individual initiative, and it leads up very naturally to the high-school work in advanced sewing and cooking, chemistry of foods, marketing, textiles, sanitation, heat, light, ventilation, fuel, laundering, hygiene, care of babies, general nursing, accounts and business forms, domestic architecture, gardening and general floral culture, etc., for girls; cabinet-making, pattern-making, forging and metal-work, machine-shop work, freehand, architectural, and mechanical drawing, electricity and steam, industrial chemistry, applied physics, heating, ventilation, sanitation, etc., for boys.

In this line of training are the essential elements of many trades which may easily be carried to a more complete development. One great advantage of this course is that it teaches the child to look ahead and to be more thoughtful; that results must be considered before action. Careful planning, exact measurements, accurate work impress upon him the importance and the habit of carefulness, patience, and accuracy, and the moral lesson of truthfulness and justice inspired by the perfect square, tight joints, and perfectly matched parts cannot be overlooked. Since a defect may be readily observed by both pupil and teacher, deception cannot readily find a place. It is impossible to substitute sham for honest endeavor.

I sincerely hope that we shall keep our industrial courses on a high educational plane. They should bear the same relation to trade instruction that liberal academic work bears to professional study. If any line of work can be demonstrated to be of greater practical value in making our children better and more efficient men and women, we will not be slow to adopt it.

II. INDUSTRIAL TRAINING IN HIGH SCHOOLS

JOSEPH M. FROST, SUPERINTENDENT OF SCHOOLS, MUSKEGON, MICH.

It is not necessary, nor does our time permit us, to discuss the psychological reasons for giving every child a peep into the broad fields of activity of the present civilization. That this must be done in the grades is admitted, if parents and teachers are to exercise a proper care in seeing to it that the child does not get into the wrong course. A child may greatly change between the ages of seven and twelve. His intellect, or his motor characteristics, may become stronger or weaker as he grows older. Therefore, his course, up to the time of his entering high school, must be such as will enable him, with the aid of parents and teachers, to make the right choice of a high-school course in which he must specialize, and in this way prevent misfits in vocational lines.

I agree with the writer of the preceding paper "that the present civilization shall determine and govern the curriculum of our schools" and "that manual training is in a

way a link between the industrial and the academic and professional courses." Realizing this, we have endeavored in our school to readjust the courses to meet present needs. Believing that there is no hard and fast rule, or any written law, whereby we may have eight years in grades and four years in high school, we have divided our schools on the seven- and five-year plan, that is, seven years for the grades and five years for the high school. In the eighth, ninth, and tenth grades we require one and one-half hours of manual training of each pupil every day. In the eleventh and twelfth grades the manual training is optional. The result is that more than 90 per cent. of the pupils take manual training during the entire course. Three academic studies per day are required for the first three years and four for the last two years, unless manual training is taken. The above plan enables us to give the academic work usually found in a high school, and also one and one-half hours of manual training per day for five years.

Without exception, we believe the high-school teachers feel that the academic work is better done, by reason of the fact that the manual training relates the work more closely to life than it appears to be in high schools where there is no manual training, and further, to many boys to whom a purely academic course does not appeal, it makes the course seem worth while. By beginning the academic work of the high school in the eighth year, we are for the present trying to take care of the pupils until such time as the university readjusts itself to the demands of those who have not devoted the entire time of the course to purely academic work. The child does not know at the outset whether he wants to go to college or not. We want to make it possible for him to secure with no difficulty entrance to the university, and, at the same time, we wish to take care of his real needs.

All the boys in our high school are given bench work, turning, joinery, cabinet-making, foundry, forging, machine-shop practice, elementary printing, freehand and mechanical drawing. The girls, cooking, elementary sewing, emergencies, household economics, laundry, dressmaking, millinery, art needle-work, freehand drawing and applied art, including pottery, metal, and leather.

By reason of the instruction of manual training the attendance at the high school has increased from

9.47	per cent. of total enrollment in 1899 and 1900,
to 10.9	per cent. of total enrollment in 1902 and 1903,
to 14.1	per cent. of total enrollment in 1905 and 1906,
to 19.1	per cent. of total enrollment February 1, 1909,

thus doubling the attendance in 9 years and this, too, in spite of the fact that the total number of school age in the city has decreased from 7,814 in 1900 to 6,583 in June, 1908. In fact, the work is so attractive that nearly 50 per cent. of each graduating class return to the high school for postgraduate and normal work.

Manual training, similar to that which we have, can be done in any small city, altho in equipment we are especially favored. An extensive equipment is not necessarily required.

Does not the record of a doubled high-school attendance in nine years prove that the extra outlay for manual training is worth while? The annual cost of the manual training in our high school (which numbers 710), including the instruction of 250 pupils from the seventh grade and 35 normal students, is about \$22,000.

Graduates of our high school and manual-training school are now teaching manual training in Columbus, Cleveland, Minneapolis, Cincinnati, St. Joseph, Mo., and other cities, and many are holding responsible and well-paying positions with manufacturing concerns.

Several of our graduates have received from one-half a year to a full year's advanced credit in the technical schools and in the engineering departments of the universities. This saving of time is an important factor.

You cannot tell what a boy can really do by the percentage he receives in some academic study, but you can find out whether he can do things after a few years' training in the shops. If education means what the word signifies, then certainly in our system we should so place

the boy that he will be able to find himself. The mass of those in our public schools will have to do things. Why then should we hesitate to get them to doing things as soon as possible?

In our schools we give a few industrial courses in an elementary way only. These are printing, pattern-making, cabinet-making, machine-shop practice, electrical construction, millinery, dressmaking, and the art crafts—pottery, metal, and leather.

The son of a man who has never earned more than \$1.50 a day, who can start in a shop at \$1.75 or \$2 a day upon graduating from high school, does not need any further demonstration of what education has done for him, without reference to any further benefit that he receives from his training.

It will not be out of the way to say that we have a standing offer from one of the manufacturing companies in our city to take any high-school graduate who has had the course in electrical construction, and whom we will recommend, and give him a job at \$1.75 per day. But above all, if the training our boys and girls receive has done no other thing, it has dignified labor in their estimation. They no longer have contempt but rather admiration for the man whose hands and clothes are soiled in the pursuit of a worthy industrial calling.

Last summer a graduate of our high school, an excellent student in academic work, as well as in domestic art and science, who is now attending one of the large, fashionable boarding schools, was giving a porch party for two young ladies who attend the same school. One of the high-school boys, known to all of the local young ladies present at that party, drove by the house on a load of gravel, which he was hauling for a local cement-construction company. Did these young ladies turn away their heads when they saw the young man coming? They called out "Hello, Charlie" with just as much fervor as if he had been dressed in dude clothes, and he raised his hat with as much dignity as he would a silk tile. This is but one of many similar instances I might relate to indicate the change of feeling that has come over boys and girls in regard to manual labor.

III. INDUSTRIAL TRAINING IN HIGH SCHOOLS

CARLETON B. GIBSON, SUPERINTENDENT OF SCHOOLS, COLUMBUS, GA.

The chairman has requested me to describe briefly the work of an industrial high school established in Columbus, Ga., known as the Secondary Industrial School.

The aim of the institution is to prepare the youth of that city and vicinity for intelligent and efficient service in industrial life. The term "industrial life" is taken to include commercial activities as well as manufacturing interests. It is a trade school, and more; it is an academic trade school of high-school rank. This means that the essentials of a high-school course are given and a trade is taught. Under the head of essentials are included the usual high-school studies in mathematics, English, history, and science. No foreign languages are taught. There has never been any intention of teaching young people a trade without giving them good academic training, for this starts a young person in life with immediate earning power, but with an earning power that is very limited. The aim is to give that culture, intelligence, and mental acumen which carry the skilled mechanic or trained accountant on to unlimited earning power.

The equipment represents an investment of something over \$100,000, much of which was donated by individuals and corporations interested in the creation of such an institution. The land and several thousand dollars were given by a public-spirited citizen who has an especial interest in this type of education. The school was built without any very large bequest, without the issue of bonds, and without any very unusual appropriation from the municipal government. Not in the slightest degree, however, is the school recognized as the peculiar property or interest of any individual, corporation, class, or faction of the people. The entire city looks upon it as its property, as its institution, and the people are united in their belief in its usefulness and in their determination to support it generously.

It is a school of the people, maintained by the people, and for all classes of people. It is not recognized as a school for artisans, nor a school of the leisure class seeking some fad. Within its student body are found the sons and daughters of the well-to-do, working earnestly and industriously side by side with the children of the dollar-a-day man. The people of all classes living in such industrial atmosphere have come to realize that the greatest opportunities for service to mankind, usefulness to society, and bread-winning occupations lie in industrial pursuits. Those who enter the school necessarily do so with a purpose more or less definite. The organization requires the pupil on entering to select one trade or industry, to which, in addition to the academic subjects required of all, he shall apply himself thruout the entire course. The plans followed embrace some rather unique features. The session continues thruout the year except the month of August. The hours of the school are the ordinary working hours, from eight to four, with thirty minutes' intermission. The traditional Saturday holiday is eliminated.

Under the supervision of the city superintendent and management of the board of trustees, the school is also supervised by an advisory board of five experts representing the leading industries and commercial interests of the city. The requirements for admission are sound bodies, fourteen years of age, and education in common-school studies thru the sixth grade of the elementary schools. The candidate for graduation, having completed the academic and industrial training, is required to spend at least two months in factory, shop, or business establishment, without compensation, and make daily reports to the school on efficiency. Reports also come weekly from the foremen over such workers.

The unusual length of session has several advantages. First, it reduces or practically eliminates the great waste in education thru loss of time in a youth's life. Second, it utilizes in an economical and business-like way the educational plant without loss of interest on the investment thru idleness and disuse. Third, it gives opportunity for a young man or a young woman to concentrate his or her educational efforts into a few years. Fourth, it offers more than twice as many hours of school work per year as the ordinary school working under the traditional nine-months' session, thus enabling the student to accomplish in the three years of the course what would ordinarily be accomplished in six years. This brings him thru his high- and trade-school training before the average boy is more than half thru his high-school course. The graduate is prepared for useful service, has good earning power, or training fitting him for entrance into a technological school, which, however, is not the primary aim of the school.

While the hours of the school day may seem, in the light of traditional school work, to be rather long and to work a hardship upon pupils, the interspersing of shop-work, or industrial training, thruout the day, giving relief from the constant nerve-tension required in the purely academic work, and the serving of a wholesome hot lunch in the school at midday, remove the possibility of detriment to health. This lunch is prepared under the direction of the domestic-science department.

At first some pupils coming from the other schools find it a little difficult to adjust themselves to the earlier hours, but the graduates of the school never find any difficulty in adjusting themselves, the morning after graduation, to working hours. One of the most admirable features of the whole school is the splendid spirit of interest, activity, and sympathetic industry manifested thruout the faculty and student body. All are wholesome, alive, energetic, and ready for anything that comes up for the good of the school.

The advisory board, made up of persons generally recognized in the community as leaders in the several industries and commercial activities, not only serves to keep the industrial work of the school of a thoroly practical nature, but also to link the school closely to the industrial establishments of the community. It is to be noticed that the state of New York has embodied this feature in its recent law providing for trade schools.

The requirements for admission in age and scholastic advancement seem to have met with favor on the part of those who have later taken up the organization of trade and industrial schools. Fourteen is quite early enough for a boy to start upon his trade training,

for he then comes out into industrial life at a minimum age of seventeen. The average age is somewhat above this, and yet, if the age is put much above fourteen, many are lost entirely to all such school training.

It is the aim at all times to be closely in touch with the actual industrial occupations. In the shops nothing is produced for the scrap-pile. All work is carefully done from the student's drawings and usually from his own blue prints. Every product has an economic value which cannot be divorced from the educational value of the process. The products are the property of the school, and if sold, the fund is converted into raw material to be used by other boys who are to become economic units. Excursions are made to shops and industrial establishments for observation and discussion, but always with a view to making the next product more valuable or the manipulation of the machine more effective.

The student, having completed the course of academic and industrial training laid down in the school requirements, is placed, by the school or an advisory-board member, in some position for which he has fitted himself. Without pay he conforms to all the requirements of the establishment, thus giving his real efficiency a practical test. Falling into the working hours of the institution, whether it be a cotton mill or a bank, he touches elbows with his fellow-workers and gets an insight into the human side of industrial life that no school can give him. He sends to the head of his school department daily reports on punctuality in attendance, persistence thruout the day, promptness in executing tasks, readiness in interpreting drawings and orders, relationship to fellow-workers, and the nature and amount of work done.

Thus far the school has had no difficulty in placing its student workers, and has had the intelligent and sympathetic co-operation of business houses and industrial establishments. This plan not only tests the pupil's real efficiency, but puts him where he may be sure of a job if he proves his worth. Coming from his overalls in the shop at the close of a day's work he may receive his diploma (in dress suit, if he please) and return to his overalls the next morning. Under the industrial ideal of this nation the typical American is the one who can wear overalls as gracefully as he wears a dress suit.

The graduation exercises of the first class to go out from the school presented some unique and interesting features, which were expressive of the aims of the school. It consisted of nine persons, three from the dressmaking department, two from the machine-shop, four from the business-training department. There were no orations or essays, few flowers, and little music. After a plain, direct statement of the ideals of the school by one of the young men, the three young women representing the dressmaking department measured, drafted the pattern, cut, fitted, and made a dress on the stage, from cloth woven during the session in the textile department. After making the dress, the young ladies retired, and one of them returned, wearing the dress, and in it she received her diploma. A simple statement of the advantages of dressmaking as a bread-winning occupation, an explanation of the system of drafting, and of the processes involved in making the dress were made by one of the young ladies.

After the dress was cut, other departments of the school were represented in the graduating exercises while these girls at one end of the stage were making music with the sewing machine and plying their nimble fingers. The graduates from the business-training department astonished the audience with the rapidity of their business calculations, took dictation from teacher and from citizens in the audience, and turned off good, business-like letters. A lawyer surprised them by stepping upon the stage and dictating a long legal letter, which was promptly reproduced without an error. Most of the graduates had positions the day after their graduation. All of them had good positions within less than six weeks, and that, too, in the summer of 1908, famous for retrenchment in working forces.

The trades or lines of industrial training offered by the school are, for the girls, millinery, dressmaking, and business training; for the boys, carpentry, pattern-making, machinist, business training, and cotton-mill work. Every course extends over three full years of forty-eight weeks each, and requires from twenty-four to thirty hours a week, in addition

to academic work. This applies to business training as well as to shop-work. There are no ten-week courses to turn out clerks and artisans without any academic training.

Every boy is required to take mechanical drawing thruout his course, and every girl must have thoro training in home economics. As the probability is that at least 80 per cent. of the young women graduating from the school will some day have the care and management of a home, and as all of them will have more or less to do with the making of a home, considerable importance is attached to thoro training in home economics. These studies include plain, fancy, and dietetic cookery, house-cleaning and decoration, sanitation, marketing, planning meals, and the intelligent and economical management of a home in a broad sense. Such training of future home-makers will contribute indirectly to the increased industrial efficiency of the workers who will come from these homes.

TOPIC: THE WARD-SCHOOL PRINCIPAL

I. QUALIFICATIONS AND FUNCTIONS OF THE WARD-SCHOOL PRINCIPAL

MILTON C. POTTER, SUPERINTENDENT OF SCHOOLS, DISTRICT NO. 1, PUEBLO, COLO.

This paper will deal with the subject in two parts in the order of the five-minute discussions which are to follow it. The expanded title then reads, "The Qualifications and Functions of the Ward-School Principal." While the nature of his functions must largely determine what his qualifications should be, we will follow the order of the discussions and begin with his qualifications.

Statements of general truths sufficiently qualified assure comparative safety to the preaching pedagog. The writer will try to screw his courage to the point necessary for explicit statement. While his remarks will not glitter they will not be generalities. Last month a dozen ward-school principals were asked to hand in their statements of a principal's qualifications. The elderly ones argued for maturity as a necessary qualification; the younger ones felt a certain enthusiastic energy to be a requisite in any principal; the female principals recognized the peculiar service of a woman in a principalship; the men found that male principals could do very many things never accomplished by women principals; the college people found academic culture to be indispensable and the normal graduates considered a grasp of definite methods as of the very greatest importance.

Neither age nor sex, culture nor pedagogical training, experience nor health can, however, have the bearing upon a principal's efficiency that is exercised by his disposition and character. Under the strain of meeting hundreds of different spirits in parents, teachers, and children day by day a principal's original stock is apt to show itself anew even thru the strongest established character. "It is therefore well to hear something from a candidate's boyhood home in making up the list of qualifications for so important a position as hat of principal.

In the list of a principal's mature characteristics, congenial good-fellowship must be placed high. Whether with the parents, the pupils, or the teachers, his willingness to meet upon the level and to share all good things will determine his influence. Then his teachers will grow genial, with him and with others, because he has been congenial.

Kindly note this passage in a recent letter from a city superintendent, an educational statesman:

Sociability among congenial souls who dream dreams and see visions, who give and take, in the process of reducing such dreams and visions to the language of common mortals, and who harbor purposes that transcend mere selfish and immediate personal expediency, enriches life for them. This is one means toward the production of moral character in our schools. This moral character is a fugitive, sometimes a vagabond thing, yet it is a most real thing and constitutes a conscious and imperative end. It is not to be produced by mere incidental teaching; it is not a mere by-product; it is the big thing after

all. It must be deliberately promoted in a somewhat informal manner. Neither school machinery nor courses of study will avail much. It means, when we learn and our school authorities in any large sense learn it, that our teaching corps must be composed of men and women who are big in character. Such men and women are irresistible in their influence upon the character of the young people with whom they associate and it matters little whether they are conscious of their gifts and method or not—indeed their bigness is very likely to consist in a large measure of transparent simplicity. The character of such people is something larger than the Sunday-school thing so many people think of. It is character in the sense of men and women who succeed, who excel, who out-compete rivals, who make the world go, who ask no quarter, who hold a good-sized globe of the world as it is in everyday engagements and conditions in their hands—it is the character and influence of men and women who are independent of their profession, who share nothing of that cowardice which springs from a sense of dependence upon a particular position, who command something of others wherever you place them.

Principals of this character are qualified for real service. Your great superintendent becomes so because of them—because he has gathered them and held them about him. While physical analogies are usually useless in the moral world, the old analogy that unlike attracts and like repels is peculiarly false in this field. Your petty superintendent retains like principals about him—obsequious, lip-loyal, cowardly, mechanical. It requires a great, generous soul to command the service of ward principals of personality, simplicity, integrity, courtesy, courage, kind hearts, and simple faith. Such are the principals, and such their qualifications, desired by every genuine superintendent of schools in America. Thus do we consult our own interests no less than our own dignity.

Further qualifications for success, which are to be developed by a ward-school principal after election, must be established in the performance of his functions, the discussion of which will constitute the second half of this paper. Those functions must be of organism. They are not a compilation of imposed duties. The school is a growth. It performs a vital service. No invention can safely devise his duties and impose them upon a school principal. That the same is true of the teachers gives rise to one of the principal's chief functions.

Vital intellectual and professional influence with teachers is possible to ward-school principals in a degree unattainable by most superintendents. The substitution, by many progressive superintendents, of ward-school round tables for the general city meeting of all teachers arises from a recognition of this fact by superintendents.

That superintendent, who goes as an honored guest into a building meeting and sits with the others under the chairmanship of the principal, has found a fulcrum for his own influence which will move his little educational world to higher endeavor and finer feeling than can ever be realized by his talking down to them from the factitious pedestal of his little brief authority. What one of us would not wish to exercise the authority of clear thinking and matured judgment over the minds and hearts of teachers, rather than the authority of accidental position?

Moreover, silent listening without opportunity for expression seldom if ever generates thought, and even where the unusual opportunity for general discussion is given in a general meeting there too often results but the desultory display of unabashed wordiness. The thoughtful, the perplexed, the timid, sit quietly in such a gathering, whereas their greater freedom in the small meeting often results in almost electrical clearing of the atmosphere.

Many most capable superintendents are poor platform performers. Even when they are very convincing public speakers, their monthly entertainments are comparatively barren of results because of the suppressed reaction of its utter absence among the teachers. Aside from general meetings by grades, the general city assembly is coming to be used more infrequently, and then only for general administrative or social purposes. As chairman of cultural and professional meetings among his teachers, then, the principal will find an organic function developing itself. It is true that many teachers talk promiscuously in such meetings, and generally behave in a manner the manifestation of which among their pupils would be inconsistently but promptly put down. The practice of the social ameni-

ties will gradually prevail, however, if the principal recognizes his function. The stronger he is, the less he will say, and the more his teachers will say—but they will say it one at a time, and each one will have his opportunity and will be listened to by all the others.

Supervision is perhaps the principal's most generally recognized sphere of usefulness. It is here given a secondary position because it must be admitted that very few teachers are materially bettered in personality or methods by means of inspection. A teacher's success or failure must be very largely achieved alone. But the wise teacher will lay hold upon the strength to be found in the verbal suggestions or model lessons of the principal. If he ignores this co-operating agency he should not be surprised at the final administration of unpleasant correctives. Intelligent, respectful disagreement is not contempt of authority. But silent perverseness most certainly is.

In so far as supervision is to result in expressed approval it is important that the latter should be not too often showered upon one teacher—for the sake of all the interests concerned. Encouragement is doubtless an important function of the principal but it must be distributive, most often indirect, usually thru the medium of the children, not spoken in the schoolroom. By praising the worthy work of the children in class, or by congratulating special ones in the office or on the school grounds, or by calling special work to the office, or by special displays of work, a principal may avoid compromising the teacher's influence by overt patronage. Disapproval must be an individual matter, never before the school. For the best results it must be plain, but it will always be the last resort after ample suggestion or direction and complete discussion of the teacher's reasons for his own way. The principal's official recommendation to the superintendent for the disposition to be made of teachers the following year will be strictly in accord with these private conferences.

The judicial function of the ward-school principal comes into play most often with the pupil affairs of his school. No greater compliment could be paid a principal than that so often rendered by pupils, willingly placing their differences in his hands for adjustment. The creation of a healthy public opinion in his school depends upon his judicial treatment of matters of general discipline arising upon the premises. Schoolroom discipline will be handled by the teacher if that teacher expects to retain his influence with the pupils. He will thus get best results; except when the child thinks he is unfair.

Finally, there is a great field of usefulness open to the ward principal in the shape of community influence. The gang controls the daily life of boys. Unless the principal can be one of the gang he may as well despair of leading them. There have been grade principals with ample opportunity for games, parties, and group construction work who have been content to circumscribe their activities by the official requirements of a short school day in a large school building. Others, with nothing to start with, have looked to the board of education not at all, but have established and animated cross-country races, basket-ball, smashball, carpenter shops, Friday-evening parties, and Saturday excursions. Those principals are present in times of sickness and trouble. They are remembered at times of success and rejoicing. Their places cannot be easily filled. Community influence is a matter of slow growth. No pre-election qualifications can fit another to take the place of one of these. The measure of their service is something other than the requirements of their employers. Their functions have grown upon them out of the necessities of the living organism which they have cultivated.

II. HOW CAN THE WARD-SCHOOL PRINCIPAL BE OF MOST SERVICE?

B. E. NELSON, SUPERINTENDENT OF CITY SCHOOLS, RACINE, WIS.

A live young teacher returned from a term's work in a new locality and expressed herself freely on her likes and dislikes in connection with the new position. She had not mentioned her new principal and was reminded of that omission. "Oh, the principal!" said she, "Why, do you know, I hadn't thought of him, because in my experience I've come to think of the principal as the man who hands out the chalk."

A wide-awake teacher may frequently find in her experience just such a principal. He may be the man "who hands out the chalk." He may be a man who looks after the machinery, the routine of his school, or he may be a man who hands out living and original ideas in suggestions or directions. He may be a live wire or he may be like that same wire with the current cut off, just as we superintendents may be. Possibly his position tempts ease and retirement a little more earnestly than does a superintendency, because of his peculiar responsibilities and surroundings. It is therefore important that he shall have a few more nerves and a little redder blood, a little more native ability than the ordinary mortal.

Most of the fault that I have found principals heir to, I believe are due to the system. We are inclined these days to charge all shortcomings, all faults, to the "system." Boards of education require him to do many things within the abilities of untrained help. Regular classwork, bookkeeping, compilation of reports, handling of school supplies can better be done by cheaper assistants. Principals are hindered from doing their best work because of a multitude of "chores" which they are called upon to do. They are the custodians of the supplies. Often they are compelled to be merchandising agents selling pens, pencils, etc. They are compelled to be the disciplinarians and peacemakers in their schools. The principal is the local truancy officer and supervising janitor. He is the clerk, the physical director, and the visiting nurse. A hundred positions he must fill, it seems to me, besides being the one thing he ought to be—an inspiring force in teaching, an expert in method, an authority on educational matters and a leader in his community, a crystallizer and organizer of community interests and activities.

I would furnish him with clerical help removing the necessity of \$300 services on a \$1,500 salary. I would have him review the teacher's outlines and plans out of school hours as the teacher prepares them. I would have him observe the application of these plans during school hours. I would have him remain out of the office and in the rooms and elsewhere as much as possible.

I want him on the playgrounds during play-hours to direct by suggestion the equally important education of the child thru play. He should know the course of study in its broadest sense, so that he can work toward the elimination of much of the waste in recitations. He should plan his teachers' meetings with care and should guard against permitting them to become discussions of routine and commonplace. His position assumes professional skill. His meetings should demonstrate that skill.

Above all he should show patience in improving the work of each teacher. His great task is to make his teachers competent, effective, better each week and each month. He should insist upon a live professional spirit in the teacher. He must, therefore, demonstrate in his activities an acquaintance with every modern educational movement.

Small schools have been his stumbling-block. Here he is primarily a teacher, not a principal. No school in any city large enough should have a school of less than twelve rooms. In such a school and in larger schools he should not teach unless it be in manual training or in some other capacity where no woman fills the bill. Where there are small schools he should have charge of several of them and should give his whole time to supervision. He should persistently visit all teachers and observe the teaching of all subjects. His visits should be prompted by and made with a definite purpose, a definite object.

He should regularly visit all other schools in the system, bring to his own schools the best he finds, correcting his own work by the standard of the best found anywhere else.

I shall not have deep regrets if the women continue in the grades but I want a big-hearted man's influence touching the life of every boy in the school, especially those in the upper grades. I am willing to be content with female teachers if I may still have big, wholesome, earnest men as directing forces in the schools.

I would have a principal supervise from sixteen to thirty-two teachers and I would insist upon supervision.

Finally he can be of greatest service by working with, not against, the school administration. His influence will be most wholesome when his teachers realize that he is in sympathy with the superintendent and the board of education. Loyalty is essential to both the employer and the employed. Success is possible only under sympathetic co-operating influences.

TOPIC: THE PROBLEM OF SLOW PUPILS—HOW TO HANDLE THEM

I. IN ELEMENTARY GRADES

H. V. HOTCHKISS, SUPERINTENDENT OF SCHOOLS, AKRON, OHIO

Most pupils who are known as slow are not deficient in mentality but are literally slow intellectually. This slowness is sometimes, but not often, general. It is usually along a certain line, or lines, of school work. It is sometimes an appearance rather than a reality.

Among the causes for slowness in pupils are these: (1) lack of language power either to understand or to express, or both; (2) timidity; (3) laziness of mind, or body; (4) bad habits of study; (5) wrong ideals; (6) the substitution of words for ideas; (7) lack of opportunity caused by absence, by poor school facilities, by foreign birth, etc.; (8) moderate mental deficiency.

The dominant idea of every public-school system should be—the best educationally for every child in the schools. This idea places the emphasis upon the individual rather than the mass, and views the mass as a collection of individuals each of whom retains his individuality. In order to be an effective force in a system of schools this idea must do more than secure mere passive assent: it must be a vital force impelling everyone connected with the schools to discover the needs of each individual and, having discovered his needs, to serve them.

The discovery of individual needs cannot be left to chance. The machinery of the schools should provide for it at definite times, by definite means, and for a definite purpose.

Often, the only record made of the failures of pupils is that made at the end of the year upon the promotion reports filed with the principal or the superintendent, and of these meager records no use is made. The teacher does not know how her work in this particular compares with that of others; principals do not know how their buildings compare; superintendents and boards of education know nothing definite of the output of their plans, make no comparisons, form no judgments, devise no means. The end of it all is, children fail and fall back; fail again and fall back; and finally fall out.

The following is suggested as a method of making the school machinery discover slow pupils and, of more importance, of making everyone in authority realize his responsibility in this work.

(1) Every principal should be a supervising principal and not a classroom teacher with a few added duties.

(2) The principal should keep in his office a record of every pupil admitted to his building from other schools. This record should contain all items of available information touching the abilities of such pupils. This information should be given to the room-teachers to whom the pupils are assigned and both principal and teachers should give special attention to these pupils.

(3) The principal should particularly charge himself with the duty of discovering the individual needs of his pupils as he visits the rooms day by day.

(4) Every teacher should understand it to be not only her privilege but her duty to call the attention of her principal and superintendent to the weakness and peculiarities of her pupils.

(5) At the end of each month, each teacher should enter in a book provided for the purpose her estimate of the powers of each pupil in the several studies pursued, together with certain other items of information touching attendance, application, conduct, and health. These books should be left in the principal's office for examination by the principal and superintendent. The teacher should also file with the estimate book, upon a form provided for the purpose, her explanation of the causes of failures. These estimate books and special reports are preserved by the principal from year to year.

(6) At the end of each semester, each principal should submit to the superintendent a report of promotions of pupils, by teachers and grades, for his building. This gives the number promoted by each teacher in each grade, at the end of the semester, and the number failed; the number promoted within the semester, and the number demoted within the semester. These reports are combined in tabular form by the superintendent and a report for the entire city is sent back to each building for study and comparisons by teachers and principals.

(7) From time to time principals report to the superintendent the numbers, by grades, etc., of pupils in their several buildings that are falling behind, and are receiving special help. These reports are discussed in principals' meetings.

These several give reports valuable information. Their greatest purpose, however, is to emphasize the necessity of serving individuals rather than classes; to compel the school system to find out those who need special treatment and help; and to place upon superintendent, principals, and teachers a sense of the responsibility of each in this enterprise.

The first duty, then, of school administrators is to seek out, inspire, encourage, and place the stamp of approval upon those who are great inspirers of youth. The second provision for the proper care of individuals is smaller classes. The power of even a great teacher becomes too thin to be effective when it is spread over 50, 60, 70, or more children.

We know the difficulties in providing schoolhouses and teachers in sufficient numbers to serve adequately rapidly growing school populations. On the other hand, I am convinced that we superintendents have failed to do our full duty in this important matter. President Jordan says, "The public will step aside to let pass the man who knows where he is going." The wise, discreet, honest, and courageous superintendent will reduce the maximum average of pupils per teacher from 60 or more to 35, and later to a smaller number.

The essential is that there should be greater elasticity in classification and gradation of pupils if slow children are to be reached. Recent investigations and reports show that the "lock-step" is not yet smashed.

The fourth suggestion for helping slow pupils is, a greater and more systematic use of what has been called the study-recitation. This is a class exercise in which the teacher leads the class in their first attack upon the lesson. It is the exercise so admirably described by Dr. Frank McMurtry at the Louisville meeting in 1906. It is the exercise that should expel from every school the one who, tho called teacher, is really a scaling-machine calling pupils, one after another, to "stand and deliver" and marking them up to promotion or down to failure.

The supreme need of the schools today, and especially of the high schools and colleges, is teaching: more direct, more discriminating, more sympathetic teaching. Teaching here does *not* mean perpetual talking by the teacher. It does *not* mean the "development exercise," much exploited in former years, in which the principal thing developed was the teacher's vocal powers. It does not mean the exploitation of impossible theories, wonderful mechanisms, and mysterious devices. It does mean leading pupils to go directly to the essential and fundamental ideas of the lesson; to seize and interpret these ideas to themselves in terms of their previous thinking, both in and out of school; and to give these ideas intelligible and adequate expression. The time and the occasion for the principal exercise of this teaching power are in the study-recitation.

The daily time given to the mastery of a given lesson might usually be divided into three portions as follows: (1) the study recitation; (2) the silent, individual study by the

pupil; (3) the final recitation, when the pupil discusses, in class, the lesson that he has prepared in the study-recitation and in the silent-study period.

Among the ends to be accomplished by the study-recitation are three: (1) It should help the pupils to know: (a) which are the great points in the lesson; (b) how to connect these with facts already learned; (c) how to determine their bearing upon the general trend of the subject; (d) what helps should be used in preparing the lesson and just how to use those helps; (e) what constitutes a mastery of the lesson and a passable recitation upon it. (2) It should develop in the pupils correct methods and habits of study. (3) It should afford the teacher an opportunity to know the powers and attainments of each of her pupils with respect to the lesson, and the subject, thereby suggesting lines of additional personal help.

Imagine, now, a comparatively small class under the leadership of a teacher of power, who is especially solicitous for the weaker member and who plays upon him with all her insight, skill, and tact, and you will realize how remote are the chances of an absolute failure.

Fifth, every teacher should provide a definite time in her daily round of duties when she will give her personal help, suitable in kind and degree, to those who need it. For, after all has been done that can be done in the way of class instruction, there will remain weak places. Bonds of sympathy and understanding have to be established. The weak one has to be strengthened and encouraged; and the laggard has to be stimulated. In this personal contact, one talking to one, with nothing intervening, the power and goodness of the teacher lifts the pupil to his best.

Finally, altho the board, the superintendent, and the teacher have done their best, yet there remain some who are failing. The supervising principal should be charged with the salvation of these. She is especially qualified for this work. She holds her position by virtue of her administrative ability, her teaching power, her professional zeal, her nobility of character, her rare tact, and her heart power. She is master of the subjects of study. She knows the course of study and has analyzed it, grade by grade, for its leading thoughts, times without number. She has advised every teacher concerning her daily plans and methods of work. She is acquainted with every pupil in her building and has been the adviser and friend of each from the day of his admission to the school. By visitation, by personal conferences with teachers, and by the formal reports of teachers filed in her office, she knows what pupils are failing, and in what particulars they are falling short. Her knowledge and experience enable her to know just what kind of personal help she can give the pupil to place him on his feet and to enable him to run alone. Often one or two lessons will be sufficient; again, a series of a week or more may be needed. Whatever the need, the principal supplies it. In the meantime the pupil goes right on with his work in his class, continually gaining strength from his mates, his regular teacher, and his principal as special teacher.

The principal of a building of 25 (or fewer) teachers and 1,000 (or fewer) children can do this work most effectively without neglecting any other important duty; and her other work will be all the more effective because of this. Should the number of pupils in a building be too great, an assistant to the principal should be employed. This assistant should possess all the qualities of a great teacher and should work with the principal and under her immediate direction and supervision.

This method of aiding slow pupils seems superior to that of establishing special, or ungraded, or delinquent schools, for several reasons. "Give a dog a bad name and hang him" is an adage that holds with peculiar force in education. Whenever a child believes that he is a failure he lives down to the belief. On the other hand a class, or an individual, will measure up, within reasonable limits, to the best that is expected of them.

Children should be educated in school with their fellows and by their fellows. Many of a child's most valuable lessons are given by his schoolmates. When they leave school all will, with their fellows, assume their portion of the world's work. None will be removed to some small plat of earth that is circumscribed and labeled Dumbville.

This method of aiding the slow pupil gives him all the benefits of class instruction together with the benefits of individual instruction. It brings him so close to his teachers that he feels them to be his trusted friends. His interest in all that interests them is quickened. He feels himself an honored part of the school body and, because of his feelings, his powers to do and to be are doubled if not quadrupled.

Every recommendation already made in this discussion should be as valid for the high school as it is for the elementary school; and it will be so where the conditions of school organization are identical. Most high schools, thruout all the four years of their courses, and a few grammar schools, thru the seventh and eighth grades, practice what is known as the departmental system of instruction, given by alleged specialists. A considerable experience, and much experimenting and thinking have convinced me that the departmental system in the grammar grades and in the first year of high school is fatal to the slow pupil and vicious in its effect upon all pupils.

When they enter the high school, children are young, immature, and dependent. They still need the personal interest of a teacher who knows them thru and thru, who sympathizes with them, and who can give them the kind of help described.

A class enters a high school where the departmental system is practiced. Their studies, their surroundings, their teachers, and most of their mates are strange. They work in seven or eight different rooms under as many different teachers. Do you wonder that the little fellows become discouraged and homesick? Is it strange that they should long for some teacher whom they can call their own, to whom they can go freely with their troubles, or who will seek them out to help them? What happens? In a short time about all the slow pupils and many of the brighter ones have vanished.

The reasons for the failure of the departmental system exist in the system itself and in the ends that it is supposed to serve:

1. It gives too many pupils to each teacher.
2. It removes the teacher in space from his pupils.
3. It forbids supervision and assistance during study.
4. It centers the interest of the teacher upon the subject, rather than upon the learner, until the teacher often does not think of the child as a living, thinking, feeling, acting human being with manifold interests and powers; but rather as a receptacle for ever increasing quantities of Latin, Algebra, or History.
5. It prevents rational correlation and co-ordination.
6. It magnifies the teacher's specialty in his mind to the exclusion of other studies.
7. It leads each teacher to demand so much for his own subject that the pupil could hardly perform it if he were to give his entire time to it.

If you would save the slow pupils and many of the brighter ones who are almost sure to be lost, abolish the departmental system from all grammar grades and from the first year, at least, of the high school. Assign a proper number of pupils to a teacher and require him to take charge of that school, to teach them all the subjects requiring study and recitation, and to serve their educational interests in all particulars.

This plan is feasible, and thoroly practical. By actual use its superiority has been proved. In a high school that I know very well, this plan of organization was adopted seven years ago. Since that time the monthly enrolment has increased from 500 to 1,050 while the enrolment in all the schools has increased but 40 per cent. As many boys as girls have been in attendance; 19 more boys than girls have graduated; there have been few failures and withdrawals in first-year classes compared with those of former years. The technical handling of subjects taught by first-year teachers is as efficient as the handling of the same subjects by special teachers in the grades above.

This discussion of methods of handling slow pupils may seem simple. It is simple. It creates no new offices; it destroys nothing. It states in detail how the present school organization may be made to solve the problem of the slow pupil in an easy and efficient way. The terms easy and efficient are used advisedly.

II. SLOW PUPILS IN THE HIGH SCHOOL

E. S. DREHER, SUPERINTENDENT OF SCHOOLS, COLUMBIA, S. C.

Altho the work of the high school is more difficult than it is in the grades, and altho slow pupils who enter the high school are more firmly fixed in their habits of thought and application than in the grades, I submit that the problem of handling these pupils to the best advantage presents fewer difficulties in the high school than in the grades, and for the following reasons: (1) the admirable suggestions made by the two speakers who have just preceded me are equally applicable to slow pupils in the high school and in the grades; (2) better teachers; (3) smaller classes; (4) a larger capacity for self-help on the part of pupils; (5) elective courses of study and a greater variety of subjects.

Assuming that my first statement is true, and that the reasons supporting it are valid, how shall we handle slow pupils in the high school?

I. Experienced teachers, such as are usually found in high schools, can greatly simplify the problem of slow pupils in the high school by persuading them on entering this school to select courses requiring a minimum of formal cultural subjects with a maximum of manual and constructive work. This presupposes that a careful record of slow pupils shall be made during the last year of the grammar grades, as suggested by Mr. Hotchkiss, and placed in the hands of high-school principals and teachers at the close of each school year, thus affording them an opportunity to do preliminary work during the summer.

Many pupils who are slow and backward in all book studies will often show remarkable proficiency in drawing, sewing, domestic science, practical physics, manual training, shop-work, commercial branches, and kindred subjects, most of which are found in progressive, modern high schools. With so great a variety of subjects from which to select, misfits in the high school should be exceedingly rare, but for two reasons, some will occur: (1) the teachers will themselves make mistakes; (2) not all the slow pupils will follow the advice of their teachers, even when it is known that they are right. What then?

II. (1) Study periods can be used to advantage by the skilful teacher, who at this time should briefly state the chief points of attack in the recitation for the benefit of the entire class, and then give special help to slow pupils. (2) Slow pupils should be given an opportunity to recite more frequently than bright ones. For them the judicious teacher will select the less difficult parts of the lesson and so temper the questions as to make a failure next to impossible. Thus encouraged, they will frequently do more difficult work in a satisfactory manner. (3) A sympathetic attitude on the part of the teacher will inspire the most backward pupil to do his best, and no reasonable limit has yet been set beyond which a slow pupil may not go, if only he does his very best. (4) Strenuous personal efforts should be made to secure the co-operation of the home. This is entirely practicable in high schools in smaller cities, and but few pupils will fail to make commendable progress when the school and the home are working together for the intellectual salvation of slow and ordinarily unpromising pupils. (5) Should all these methods fail to secure good results, individual instruction must be provided for backward pupils, not necessarily for each individual pupil, but for small groups of individuals who are deficient in certain subjects in common. Segregation of all slow pupils in the high school in one room with one teacher does not commend itself to me. When removed from their classmates and limited to the resources of one teacher the work will become dull and lifeless and the slow pupils will miss the help and inspiration that come from the contact of slower with brighter minds.

An extra teacher or teachers for coaching slow pupils during school hours is unquestionably the best solution of the problem, but as the expense involved is prohibitive in many small cities, this plan cannot be generally adopted. As suggested by Mr. Hotchkiss, however, the principal could instruct slow pupils for a few hours each day, and thus approximate the service that could be rendered slow pupils by an extra teacher.

THE NATIONAL COUNCIL OF EDUCATION

CONSTITUTION

PREAMBLE

The National Council of Education shall have for its object the consideration and discussion of educational questions of general interest and public importance, and the presentation, thru printed reports, of the substance of the discussions and the conclusions formulated. It shall be its object to reach and disseminate correct thinking on educational questions; and, for this purpose, it shall be the aim of the Council, in conducting its discussions, to define and state with accuracy the different views and theories on the subject under consideration, and, secondly, to discover and represent fairly the grounds and reasons for each theory or view, so far as to show, as completely as possible, the genesis of opinion on the subject. It shall be the duty of the Council, in pursuance of this object, to encourage from all its members the most careful statement of differences in opinion, together with the completest statement of grounds for the same. It shall further require the careful preservation and presentation of the individual differences of opinion, whenever grounds have been furnished for the same by members of the Council. It shall invite the freest discussion and embody the new suggestions developed by such discussions. Any member making such suggestion or objection may put in writing his view, and the grounds therefor, and furnish the same to the secretary for the records of the Council. It shall prepare, thru its president, an annual report to the National Educational Association, setting forth the questions considered by the Council during the previous year, and placing before the Association, in succinct form, the work accomplished. It shall embody in this report a survey of those educational topics which seem to call for any action on the part of the Association. The Council shall appoint, out of its own number, committees representing the several departments of education, and thereby facilitate the exchange of opinion among its members on such special topics as demanded the attention of the profession or of the public.

ARTICLE I—MEMBERSHIP

1. The National Council of Education shall consist of sixty members, selected from the membership of the National Educational Association. Any member of the Association identified with educational work is eligible to membership in the Council, and, after the first election, such membership shall continue for six years, except as hereinafter provided.

2. In the year 1885 the Board of Directors shall elect eight members—four members for six years, two for four years, and two for two years, and the Council shall elect eight members—five members for six years, two for four years, and one for two years; and annually thereafter the Board of Directors shall elect five members and the Council five members, each member, with the exception hereinafter provided for (sec. 5), to serve six years, or until his successor is elected.

3. The annual election of members of the Council shall be held in connection with the annual meetings of the Association. If the Board of Directors shall fail, for any reason, to fill its quota of members annually, the vacancy or vacancies shall be filled by the Council.

4. The term of service of the several members of the Council chosen at the first election shall be arranged by the Executive Committee of the Council.

5. The absence of a member from two consecutive annual meetings of the Council shall be considered equivalent to resignation of membership, and the Council shall fill vacancies caused by absence from the Council as herein defined, as well as vacancies caused by death or resignation, for the unexpired term. All persons who have belonged to the Council shall, on the expiration of their membership, become honorary members, with the privilege of attending its regular sessions and participating in its discussions. No state shall be represented in the Council by more than eight members.

ARTICLE II—QUALIFICATION FOR MEMBERSHIP

All members of the Council shall be either life or active members of the National Educational Association.

ARTICLE III—MEETINGS

There shall be a regular annual meeting of the Council held at the same place as the meeting of the National Educational Association, and at least two days previous to this meeting. There may be special meetings of the Council, subject to the call of the Executive Committee, but the attendance at these meetings shall be entirely voluntary. A majority of the Council shall constitute a quorum for the transaction of business at any meeting, whether regular or called; but any less number, exceeding eight members, may constitute a quorum for the transaction of business at the regular annual meeting, as defined in this article.

ARTICLE IV—THE WORK OF THE COUNCIL

The Council shall, from time to time, undertake to initiate, conduct, and guide the thoro investigation of important educational questions originating in the Council; also to conduct like investigations originating in the National Educational Association, or any of its departments, and requiring the expenditure of funds.

ARTICLE V—THE APPOINTMENT OF SPECIAL COMMITTEES AND EXPERTS

In the appointment of special committees, and in the selection of writers and speakers, it shall be the privilege of the Council to appoint such experts, whether members of the Council or not, as are deemed best qualified to conduct investigations.

ARTICLE VI—OFFICERS

At the annual election of officers in 1904 the president of the Council shall be elected for a term of three years, the vice-president for a term of two years, and the secretary for a term of one year; and thereafter annually the vacancy caused by the outgoing officers shall be filled by the election of one person for a term of three years.

It shall be the duty of the president of the Council to prepare, with the assistance and approval of the Executive Committee, such a program for the annual meeting as shall realize as fully as practicable the purposes for which the Council was organized and exists.

ARTICLE VII—STANDING COMMITTEES

1. There shall be four standing committees: an Executive Committee, a Committee on Membership, a Committee on Educational Progress, and a Committee on Investigations and Appropriations.

2. The Executive Committee shall be composed of the president of the Council and of three other members, whose terms of office shall be so arranged that one new member may be chosen each year, beginning with the year 1899.

3. It shall be the duty of the Executive Committee to provide an annual program by selecting, whenever feasible, subjects for investigation, and appointing committees to conduct such investigations. It shall be the duty of the Executive Committee to carry

out the provisions contained in this constitution referring to volunteer and invited papers. It shall be the duty of the Executive Committee to provide a place on the program for the report of any investigation which may be ordered by the National Educational Association or its departments.

4. The Committee on Membership shall be composed of the president of the Council and six other members, whose terms of office shall be so arranged that two vacancies may be filled every year, beginning with 1899.

5. There shall be appointed annually a committee of one to submit at the next meeting a report on "Educational Progress during the Past Year," in which a survey of the important movements and events in education during the preceding year is given. This committee need not be selected from the members of the Council.

6. The Committee on Investigations and Appropriations shall be composed of nine members, whose terms of office shall be so arranged that three vacancies may be filled each year, beginning with 1903. No proposal to appoint a committee to undertake an educational investigation of any kind, and no proposal to ask the Board of Directors of the Association for an appropriation for any purpose, shall be acted upon until such proposal has been referred to this Committee on Investigations and Appropriations for report.

ARTICLE VIII—THE DUTIES OF THE COUNCIL

1. It shall be the duty of the Council to further the objects of the National Educational Association, and to use its best efforts to promote the cause of education in general.

2. The meetings of the Council shall be, for the most part, of a "round table" character.

ARTICLE IX—AMENDMENTS

This constitution may be altered or amended at a regular meeting of the Council, by a two-thirds vote of the members present, and any provisions may be waived at any regular meeting by unanimous consent.

By-laws not in violation of the constitution may be adopted by a two-thirds vote of the Council.

OFFICERS, STANDING COMMITTEES, MEMBERS

OFFICERS FOR 1909-10

JOSEPH SWAIN.....	Swarthmore, Pa.....	<i>President</i>	Term expires in 1910
WILLIAM M. DAVIDSON....	Omaha, Nebr.....	<i>Vice-President</i>	Term expires in 1912
JOHN W. CARR.....	Bayonne, N. J.....	<i>Secretary</i>	Term expires in 1911

EXECUTIVE COMMITTEE

THE PRESIDENT, *ex officio*, chairman

WILLIAM T. HARRIS.....	Washington, D. C.....	Term expires in 1910
JAMES M. GREENWOOD.....	Kansas City, Mo.....	Term expires in 1911
ELMER ELLSWORTH BROWN.....	Washington, D. C.....	Term expires in 1912

COMMITTEE ON MEMBERSHIP

THE PRESIDENT, *ex officio*

LIVINGSTON C. LORD.....	Charleston, Ill.....	Term expires in 1910
I. C. McNEILL.....	Memphis, Tenn.....	Term expires in 1910
CHARLES H. KEYES.....	Hartford, Conn.....	Term expires in 1911
JAMES M. GREENWOOD, <i>chairman</i>	Kansas City, Mo.....	Term expires in 1911
AUGUSTUS S. DOWNING.....	Albany, N. Y.....	Term expires in 1912
CARROLL G. PEARSE.....	Milwaukee, Wis.....	Term expires in 1912

COMMITTEE ON INVESTIGATIONS AND APPROPRIATIONS

AUGUSTUS S. DOWNING.....	Albany, N. Y.....	Term expires in 1910
LORENZO D. HARVEY.....	Menomonie, Wis.....	Term expires in 1910
JOHN H. PHILLIPS.....	Birmingham, Ala.....	Term expires in 1910
NICHOLAS MURRAY BUTLER.....	New York, N. Y.....	Term expires in 1911
WILLIAM H. MAXWELL.....	New York, N. Y.....	Term expires in 1911
WILLIAM O. THOMPSON.....	Columbus, Ohio.....	Term expires in 1911
JAMES M. GREENWOOD, <i>chairman</i>	Kansas City, Mo.....	Term expires in 1912
FRANK A. FITZPATRICK.....	Boston, Mass.....	Term expires in 1912
ELMER ELLSWORTH BROWN.....	Washington, D. C.....	Term expires in 1912

MEMBERS

Elected by the Association

JOHN W. COOK, DeKalb, Ill.
 DAVID R. BOYD, Norman, Okla.
 LORENZO D. HARVEY, Menomonie, Wis.
 EDWIN B. CRAIGHEAD, New Orleans, La.
 CARROLL G. PEARSE, Milwaukee, Wis.
 *HENRY SNYDER, Jersey City, N. J.
 *KATHARINE E. DOPP, Chicago, Ill.
 *EDWIN E. SPARKS, State College, Pa.
 *HENRY SUZZALLO, New York, N. Y.
 *HENRY C. MORRISON, Concord, N. H.

TERMS EXPIRE IN 1910

*ANNA TOLMAN SMITH, Washington, D. C.
 WILLIAM S. SUTTON, Austin, Tex.
 JAMES H. VAN SICKLE, Baltimore, Md.
 *JAMES B. ASWELL, Natchitoches, La.
 *BROWN AYRES, Knoxville, Tenn.
 ROBERT J. ALEY, Indianapolis, Ind.
 CHARLES E. CHADSEY, Denver, Colo.
 *PAUL H. HANUS, Cambridge, Mass.
 J. STANLEY BROWN, Joliet, Ill.
 R. L. JONES, Nashville, Tenn.

Elected by the Council

TERMS EXPIRE IN 1911

WILLIAM H. BARTHOLOMEW, Louisville, Ky.
 FRANK A. FITZPATRICK, Boston, Mass.
 I. C. McNEILL, Memphis, Tenn.
 E. ORAM LYTE, Millersville, Pa.
 JAMES M. GREENWOOD, Kansas City, Mo.
 ESTELLE REEL, Washington, D. C.
 A. J. MATTHEWS, Tempe, Ariz.
 JULIUS I. FOUST, Greensboro, N. C.
 W. T. CARRINGTON, Springfield, Mo.
 *JOHN J. DOYNE, Little Rock, Ark.

*FRANK B. COOPER, Seattle, Wash.
 JOSEPH SWAIN, Swarthmore, Pa.
 NATHAN C. SCHAEFFER, Harrisburg, Pa.
 BEN BLEWETT, St. Louis, Mo.
 Z. X. SNYDER, Greeley, Colo.
 JOHN W. ABERCROMBIE, University, Ala.
 B. W. TORREYSON, Little Rock, Ark.
 *FREDERICK E. BOLTON, Iowa City, Iowa
 *JANE ADDAMS, Chicago, Ill.
 D. B. PARKINSON, Carbondale, Ill.

TERMS EXPIRE IN 1912

THOMAS A. MOTT, Richmond, Ind.
 JOHN H. PHILLIPS, Birmingham, Ala.
 *LIVINGSTON C. LORD, Charleston, Ill.
 JAMES H. BAKER, Boulder, Colo.
 CHARLES C. VAN LIEW, Chico, Cal.
 *SARAH LOUISE ARNOLD, Boston, Mass.
 JAMES A. MACLEAN, Moscow, Idaho
 EDWARD T. FAIRCHILD, Topeka, Kans.
 ALFRED BAYLISS, Macomb, Ill.
 *ERNEST C. MOORE, Los Angeles, Cal.

ELLA FLAGG YOUNG, Chicago, Ill.
 *JASPER N. WILKINSON, Muskogee, Okla.
 *WILLIAM O. THOMPSON, Columbus, Ohio
 *JOHN W. CARR, Bayonne, N. J.
 ALBERT SALISBURY, Whitewater, Wis.
 *GRACE C. STRACHAN, Brooklyn, N. Y.
 *ADELAIDE S. BAYLOR, Wabash, Ind.
 *CARLETON B. GIBSON, Columbus, Ga.
 *JOHN W. OLSEN, St. Paul, Minn.
 *OSCAR T. CORSON, Columbus, Ohio

TERMS EXPIRE IN 1913

JAMES M. GREEN, Trenton, N. J.
 AUGUSTUS S. DOWNING, Albany, N. Y.
 GEORGE B. COOK, Little Rock, Ark.
 STRATTON D. BROOKS, Boston, Mass.
 EDGAR H. MARK, Louisville, Ky.
 *IDA C. BENDER, Buffalo, N. Y.
 HENRY B. BROWN, Valparaiso, Ind.
 *WILLIAM O. RIDDELL, Des Moines, Iowa
 A. C. NELSON, Salt Lake City, Utah
 REED B. TEITRICK, Harrisburg, Pa.

*WILLIAM E. HATCH, New Bedford, Mass.
 *BETTIE A. DUTTON, Cleveland, Ohio
 CHARLES H. KEYES, Hartford, Conn.
 *ANDREW S. DRAPER, Albany, N. Y.
 CLIFFORD W. BARNES, Lake Forest, Ill.
 *MRS. ELLOR C. RIPLEY, Boston, Mass.
 *MRS. EDWIN C. GRICE, Philadelphia, Pa.
 *JOHN W. WITHERS, St. Louis, Mo.
 THOMAS C. MILLER, Shepherdstown, W. Va.
 FRANK B. DYER, Cincinnati, Ohio.

TERMS EXPIRE IN 1914

*O. J. CRAIG, Missoula, Mont.
 DAVID FELMLEY, Normal, Ill.
 JOHN R. KIRK, Kirksville, Mo.

WILLIAM M. DAVIDSON, Omaha, Nebr.
 *M. G. BRUMBAUGH, Philadelphia, Pa.
 L. E. WOLFE, San Antonio, Tex.

*Not present at Annual Meeting, 1909.

Elected by the Association

- DAVID B. JOHNSON, Rock Hill, S. C.
 *WALES C. MARTINDALE, Detroit, Mich.
 MRS. ELLEN H. RICHARDS, Boston, Mass.
 ARTHUR H. CHAMBERLAIN, Pasadena, Cal.
 *M. BATES STEPHENS, Annapolis, Md.
 JACOB A. SHAWAN, Columbus, Ohio
 JAMES W. CRABTREE, Peru, Nebr.

- JOHN MACDONALD, Topeka, Kans.
 ALMA L. BINZEL, Provo, Utah
 C. O. MERICA, Laramie, Wyo.
 S. L. HEETER, St. Paul, Minn.
 CHARLES MCKENNY, Milwaukee, Wis.
 *W. T. HARRIS, P. Ovidence, R. I.
 W. R. SIDERS, Pocatello, Idaho
 WILLIAM H. MAXWELL, New York, N. Y.
 E. G. COOLEY, Boston, Mass.
 H. J. ROGERS, Albany, N. Y.

TERMS EXPIRE IN 1915

Elected by the Council

- *JAMES E. RUSSELL, New York, N. Y.
 O. S. WESTCOTT, Chicago, Ill.
 *JULIA RICHMAN, New York, N. Y.
 MRS. JOSEPHINE HEERMANS, Kansas City, Mo.
 FRANK STRONG, Lawrence, Kans.
 *E. C. ELLIOTT, Madison, Wis.
 HOMER H. SEERLEY, Cedar Falls, Iowa
 MISS N. CROPSEY, Indianapolis, Ind.
 LEWIS H. JONES, Ypsilanti, Mich.
 ELMER ELLSWORTH BROWN, Washington, D. C.
 WILLIAM H. BLACK, Marshall, Mo.
 NICHOLAS MURRAY BUTLER, New York, N. Y.
 LUTHER L. WRIGHT, Lansing, Mich.
 GEORGE M. PHILIPS, Westchester, Pa.
 EDMUND A. JONES, Columbus, Ohio
 ERNEST E. BALCOMB, Providence, R. I.
 J. E. BURKE, Boston, Mass.

HONORARY MEMBERS

- EDWIN A. ALDERMAN, Charlottesville, Va.
 EARL BARNES, Philadelphia, Pa.
 ALEXANDER GRAHAM BELL, Washington, D. C.
 D. BEMIS, Spokane, Wash.
 THOMAS W. BICKNELL, Providence, R. I.
 RICHARD G. BOONE, Los Angeles, Cal.
 ALBERT G. BOYDEN, Bridgewater, Mass.
 ANNA C. BRACKETT, New York, N. Y.
 JOHN E. BRADLEY, Randolph, Mass.
 EDWARD BROOKS, Philadelphia, Pa.
 GEORGE P. BROWN, Bloomington, Ill.
 WILLIAM L. BRYAN, Bloomington, Ind.
 MATTHEW H. BUCKHAM, Burlington, Vt.
 DAVID N. CAMP, New Britain, Conn.
 P. P. CLAXTON, Knoxville, Tenn.
 OSCAR H. COOPER, Abilene, Tex.
 WILLIAM J. CORTELL, Gorham, Maine.
 E. W. COY, Cincinnati, Ohio
 CHARLES DEGARMO, Ithaca, N. Y.
 ROBERT E. DENFELD, Duluth, Minn.
 JOHN DEWEY, New York, N. Y.
 V. C. DIBBLE, Charleston, S. C.
 CHARLES W. ELIOT, Cambridge, Mass.
 WILLIAM W. FOLWELL, Minneapolis, Minn.
 JAMES A. FOSHAY, Los Angeles, Cal.
 WILLIAM K. FOWLER, Lincoln, Nebr.
 H. B. FRISSELL, Hampton, Va.
 R. B. FULTON, Miller School P. O., Va.
 CHARLES B. GILBERT, Englewood, N. J.
 AARON GOVE, Denver, Colo.
 LEWIS C. GREENLEE, Denver, Colo.
 JAMES C. GREENOUGH, Westfield, Mass.
 W. N. HAILMANN, Cleveland, Ohio
 G. STANLEY HALL, Worcester, Mass.
 WALTER L. HERVEY, New York, N. Y.
 ALBERT ROSS HILL, Columbia, Mo.
 J. GEORGE HODGINS, Toronto, Can.
 JAMES H. HOOSE, Los Angeles, Cal.
 GEORGE H. HOWISON, Berkeley, Cal.
 JAMES L. HUGHES, Toronto, Can.
 THOMAS HUNTER, New York, N. Y.
 ELLEN HYDE, Farmington, Mass.
 EDMUND J. JAMES, Champaign, Ill.
 CHARLES M. JORDAN, Minneapolis, Minn.
 E. S. JOYNES, Columbia, S. C.
 CALVIN N. KENDALL, Indianapolis, Ind.
 DAVID L. KIEHLE, Preston, Minn.
 WILLIAM F. KING, Mt. Vernon, Iowa
 HENRY M. LEIPZIGER, New York, N. Y.
 JAMES MACALISTER, Philadelphia, Pa.
 FRANCIS A. MARCH, Easton, Pa.
 GEORGE H. MARTIN, West Lynn, Mass.
 CHARLES A. McMURRAY, DeKalb, Ill.
 JESSE F. MILLSAUGH, Los Angeles, Cal.
 WILLIAM A. MOWRY, Hyde Park, Mass.
 MARY E. NICHOLSON, Indianapolis, Ind.
 JOHN M. ORDWAY, New Orleans, La.
 WARREN D. PARKER, Pasadena, Cal.
 JOHN B. PEASLEE, Cincinnati, Ohio
 JOSIAH L. PICKARD, Los Angeles, Cal.
 EDWARD T. PIERCE, Los Angeles, Cal.
 JAMES R. PRESTON, Jackson, Miss.
 JOHN T. PRINCE, West Newton, Mass.
 GEORGE J. RAMSEY, Danville, Ky.
 WILLIAM D. RUFFNER, Lexington, Va.
 ELLEN C. SABIN, Milwaukee, Wis.
 HENRY SABIN, Des Moines, Iowa
 J. G. SCHURMAN, Ithaca, N. Y.
 H. E. SHEPARD, Baltimore, Md.
 IRWIN SHEPARD, Winona, Minn.
 CHARLES R. SKINNER, New York, N. Y.
 EULER B. SMITH, Athens, Ga.
 J. LANCASTER SPALDING, Peoria, Ill.
 HOMER D. SPRAGUE, Newton, Mass.
 LUCIA STICKNEY, Cleveland, Ohio
 GRACE BIBB SUDBOROUGH, Omaha, Nebr.
 JOHN SWETT, Martinez, Cal.
 A. R. TAYLOR, Decatur, Ill.
 W. R. THIGPEN, Savannah, Ga.
 JOHN G. THOMPSON, Fitchburg, Mass.
 L. S. THOMPSON, Jersey City, N. J.
 CHARLES F. THWING, Cleveland, Ohio
 JULIA S. TUTWILER, Livingston, Ala.
 DELIA L. WILLIAMS, Delaware, Ohio
 J. ORMOND WILSON, Washington, D. C.
 LIGHTNER WITMER, Philadelphia, Pa.
 HARRY K. WOLFE, Lincoln, Nebr.
 CALVIN M. WOODWARD, St. Louis, Mo.

* Not present at Annual Meeting, 1909.

DECEASED MEMBERS

ROBERT ALLEN.....1894	WILLIAM R. HARPER.....1906	W. H. PAYNE.....1907
ISRAEL W. ANDREWS.....1888	WILLIAM D. HENKLE.....1882	SELIM H. PEABODY.....1902
JOSEPH BALDWIN.....1890	EDWIN C. HEWITT.....1905	WILLIAM F. PHELPS.....1907
HENRY BARNARD.....1900	ELNATHAN E. HIGBEE.....1889	JOHN D. PHILBRICK.....1885
WILLIAM N. BARRINGER.....1907	FRANK A. HILL.....1903	M. S. COOPER POUCHER.....1900
NEWTON BATEMAN.....1897	BURKE A. HINSDALE.....1900	WILLIAM B. POWELL.....1904
WILLIAM C. BATES.....1909	IRA G. HOITT.....1905	ZALMON RICHARDS.....1890
REUBEN S. BINGHAM.....1902	GEORGE HOWLAND.....1892	ANDREW J. RICKOFF.....1890
JOHN T. BUCHANAN.....1908	JOHN S. IRWIN.....1901	CHARLES C. ROUNDS.....1901
NORMAN A. CALKINS.....1895	HENRY N. JAMES.....1901	EDWARD R. SHAW.....1903
JAMES H. CANFIELD.....1909	H. S. JONES.....1900	WILLIAM E. SHELDON.....1900
AARON L. CHAPIN.....1892	THOMAS KIRKLAND.....1898	EDGAR A. SINGER.....1909
CLARA CONWAY.....1904	ALBERT LANE.....1906	JAMES A. SMART.....1900
J. L. M. CURRY.....1902	MERRICK LYON.....1888	F. LOUIS SOLDAN.....1908
N. R. H. DAWSON.....1895	ALBERT P. MARBLE.....1906	J. W. STEARNS.....1909
JOHN W. DICKINSON.....1901	JAMES MCCOSH.....1894	R. W. STEVENSON.....1893
LARKIN DUNTON.....1899	CHARLES D. MCIVER.....1906	THOMAS B. STOCKWELL.....1906
JOHN EATON.....1906	THOMAS J. MORGAN.....1902	ELI T. TAPPAN.....1908
W. R. GARRETT.....1903	LEMUEL MOSS.....1905	HORACE S. TARBELL.....1904
DANIEL C. GILMAN.....1909	M. A. NEWELL.....1893	CHARLES O. THOMPSON.....1885
SAMUEL S. GREENE.....1883	BIRDSEY G. NORTHROP.....1898	H. S. THOMPSON.....1904
JOHN M. GREGORY.....1898	THEODORE B. NOSS.....1909	ARNOLD TOMPKINS.....1906
GEORGE T. FAIRCHILD.....1901	EDWARD OLNEY.....1886	JAMES P. WICKERSHAM.....1891
DANIEL B. HAGAR.....1896	GUSTAVUS J. ORR.....1888	S. G. WILLIAMS.....1900
R. H. HALSEY.....1907	FRANCIS W. PARKER.....1902	EMERSON E. WHITE.....1902
JOHN HANCOCK.....1891	S. S. PARR.....1900	

SECRETARY'S MINUTES

FIRST SESSION.—SATURDAY FORENOON, JULY 3, 1909

The National Council of Education met in the Assembly Room of the Brown Palace Hotel, Denver, Colo., and was called to order at 9:40 A. M. by President Joseph Swain.

Secretary John W. Carr being absent, Robert J. Aley, of Indiana, was appointed Acting Secretary for the meetings.

The minutes of the Cleveland meeting were approved as printed in the volume of *Proceedings* of the Association, for that year.

The introductory address of the president of the Council was presented by Joseph Swain.

The recommendations of President Swain were on motion referred to a Committee consisting of: James M. Green, Henry B. Brown, and Charles H. Keyes.

The next item on the program was "Report of Committee on Provision for Exceptional Children in the Public Schools." As the chairman of the committee, Superintendent James H. Van Sickle, of Baltimore, Md., was absent, the introductory statement was omitted.

Special papers were presented as follows:

1. "Care of the Deaf and Blind," by Carroll G. Pearse, superintendent of schools, Milwaukee, Wis.
2. "Systematic Care of the Exceptional Child," by Miss Olive M. Jones, principal of School No. 120, Special, New York City.
3. "Provision for Exceptional Children in the Public Schools of Chicago," by Frank G. Bruner, Child Study Department, Board of Education, Chicago, Ill.
4. "Provision for Exceptional Children in the Schools of St. Louis," by Ben Blewett, superintendent of instruction, St. Louis, Mo.
5. "Provision for Exceptional Children in the Schools of Boston," Stratton D. Brooks, superintendent of schools, Boston, Mass.

6. "The Next Step in the Investigation," Luther Halsey Gulick, Russell Sage Foundation, New York City.

The general discussion was participated in by Alfred Bayliss, I. C. McNeill, O. S. Wescott, and C. G. Pearse.

"The Report of the Committee on Moral Training in the Public Schools" was presented by the chairman of the committee, Superintendent James M. Greenwood, Kansas City. Superintendent Greenwood stated that much work had been done by individual members of the committee and that arrangements would be made for the publication of these results and their distribution to members of the Council. On motion, the committee was continued with instructions to make a report at the next annual meeting in a form suitable for publication in the volume of *Proceedings*.

The following named persons engaged in the general discussion: Miss Alma L. Binzel, Henry B. Brown, James M. Green, James M. Greenwood, Charles H. Keyes, and William H. Bartholomew.

At the Cleveland meeting in 1908, Charles H. Keyes was appointed as a special committee of one to prepare amendments to the constitution that would bring that instrument into harmony with the practices of the Council. He reported as follows:

1. Strike out of preamble lines 17, 18, 19, 20, and part of 21, beginning with the words, "It shall prepare" and ending with the words, "the part of the Association."

2. Strike out in lines 2 and 3 of Article III the words, "and at least two days previous to this meeting."

A motion was made and seconded to adopt the report. Another motion was made and seconded to postpone action on the report for one year and to have the committee furnish copies of the proposed amendments to the members of the Council. After considerable discussion the whole matter was on motion laid upon the table.

On motion, Chairman Keyes was requested to submit in writing to the members of the Council the proposed amendment to Article III of the constitution.

In the midst of the discussion of the motion, "It is the sense of the Council that the published proceedings be considered the formal report," a motion to adjourn prevailed, and no action upon this motion was taken.

SECOND SESSION.—SATURDAY AFTERNOON, JULY 3, 1909

A "Report of Progress of the Committee on the Culture Element and Economy of Time in Education" was given by the chairman of the committee, President James H. Baker, of the University of Colorado.

Principal William H. Smiley and Superintendent Charles E. Chadsey discussed the report.

Augustus S. Downing, first assistant commissioner of education of New York, read a paper on "What Industrial Education Means to the Elementary Schools." A spirited discussion followed the reading of this paper. The participants were: Wm. M. Davidson, E. E. Balcomb, E. A. Jones, J. A. Shawan, Ben Blewett, J. M. Greenwood, John W. Cook, Charles H. Keyes, C. G. Pearse, and John R. Kirk. The discussion was closed by Mr. Downing.

President Swain appointed as successors to Wm. T. Harris and Jesse F. Millspaugh on the Committee on Membership: Augustus S. Downing, Albany, N. Y.; Carroll G. Pearse, Milwaukee, Wis.

The Committee on Membership as now constituted is:

Livingston C. Lord, Charleston, Ill.; term expires 1910.

I. C. McNeill, Memphis, Tenn.; term expires 1910.

Charles H. Keyes, Hartford, Conn.; term expires 1911.

James M. Greenwood, Kansas City, Mo., *Chairman*; term expires 1911.

A. S. Downing, Albany, N. Y.; term expires 1912.

Carroll G. Pearse, Milwaukee, Wis.; term expires 1912.

THIRD SESSION.—SATURDAY EVENING, JULY 3, 1909

United States Commissioner of Education, Elmer Ellsworth Brown, gave the "Report of Committee on Co-operation with Educational Organizations in Other Countries."

On motion of Superintendent James M. Greenwood, it was agreed that the Chair should appoint the committee recommended in the report and that Commissioner Brown should be the chairman.

President Swain appointed the committee as follows: Elmer Ellsworth Brown, Nicholas Murray Butler, and James M. Greenwood.

President John W. Cook, of the Northern Illinois Normal School, presented the "Report on Educational Progress during the Year."

FOURTH SESSION.—MONDAY FORENOON, JULY 5, 1909

A paper on "Rural School Supervision" was presented by State Superintendent Nathan C. Schaeffer, of Pennsylvania. The speakers in the general discussion were: Robert J. Ale, state superintendent of Indiana; John MacDonald, editor of *Western School Journal*, Topeka, Kans.; Thomas C. Miller, ex-state superintendent of West Virginia; A. C. Nelson, state superintendent of Utah; G. M. Philips, principal State Normal School, Westchester, Pa.; and T. A. Mott, superintendent of schools, Richmond, Ind. The discussion was closed by Superintendent Schaeffer.

"The Adjustment of Our School System to the Changed Conditions of the Twentieth Century" was presented by President E. G. Cooley of D. C. Heath & Co., Boston, Mass.

Those participating in the general discussion were: James A. MacLean, president of the University of Idaho; J. Stanley Brown, principal of Township High School, Joliet, Ill.; Arthur H. Chamberlain, dean of the Throop Polytechnic Institute, Pasadena, Cal.; James W. Crabtree, president of the State Normal School, Peru, Nebr.; Z. X. Snyder, president of the State Normal School, Greeley, Colo., and John W. Cook, president of the State Normal School, DeKalb, Ill. Mr. Cooley closed the discussion.

Upon motion, the recommendations made by President MacLean in his discussion were referred to the Committee on the President's Address.

The Committee on the President's Address reported as follows:

To the Officers and Members of the National Education Association:

Your committee to which were referred the recommendations and inquiries of the President's address has given the same careful consideration and begs to submit the following:

1. That no committees be raised at this time to consider any new subjects unless specially ordered by the Council.

We do recommend that one full section of the Council Meeting of 1910 be devoted to consideration of the now completed report of the committee heretofore constituted by the Board of Directors on "The Place of Industries in Education," and that the Council request the Board of Directors to print and place in the hands of each active member of the Association a copy of this report.

2. That the Council approves the present policy as to program.

3. That the Council requests the President of the National Education Association to appoint a committee to co-operate with the United States Commissioner of Education in urging Congress to increase the appropriation to the Bureau of Education, in order that it may the better perform much-needed valuable work.

Respectfully submitted

JAMEL M. GREEN, *Chairman*
HENRY B. BROWN
ELMER ELLSWORTH BROWN
CHARLES H. KEYES, *Secretary*

Superintendent J. H. Van Sickel, who was absent from the meetings on July 3, was now present and began his discussion of President Baker's report.

FIFTH SESSION.—MONDAY AFTERNOON, JULY 5, 1909

The meeting was called to order by President Swain at 2:30 P. M. The program was as follows:

Topic: The Administration of Public Educational Systems: What Authority Should Be Vested in the State; What Should Be Granted to Subordinate Divisions; and What Should Be Left to the People?

a) "The Province of the Common People in the Administration of Public Education," by Homer H. Seerley, president of Iowa State Normal School, Cedar Falls, Iowa.

b) "The Province of State Boards and State Superintendents in the Administration of Public Education," by Edwin T. Fairchild, state superintendent of public instruction, Topeka, Kans.

c) "The Province of Supervision of Counties and Cities in the Administration of Public Education," by Charles H. Keyes, superintendent of schools, Hartford, Conn.

d) "The Province of State Educational Institutions in the Administration of Public Education," by William O. Thompson, president of Ohio State University, Columbus, Ohio.

President Thompson was unavoidably absent, but the main points of his paper were presented by President James A. Baker of the University of Colorado. President Baker also opened the general discussion.

The other participators in the general discussion were: Professor William S. Sutton, of the University of Texas; President W. T. Carrington, of the State Normal School, Springfield, Mo.; President John R. Kirk, of the State Normal School, Kirksville, Mo.; Chancellor Frank Strong, of the University of Kansas, and Frank A. Fitzpatrick, of Boston. The discussion was closed by President Seerley.

The next matter on the program was the "Report of the Committee on Resolutions of the General Association." E. G. Cooley, the chairman of this committee, stated that he had been unable to get the committee together to agree upon a report. Upon motion of Carroll G. Pearse, the Council expressed its appreciation of the efforts made by Chairman Cooley and excused him from making a report.

The following committee report was presented and unanimously adopted by the Council:

To the National Council:

Your committee on nominations and new members recommends the appointment of the following members to succeed themselves: Miss N. Cropsey, of Indiana; Lewis H. Jones, of Michigan; Elmer Ellsworth Brown, of District of Columbia; Wm. H. Black, of Missouri; Nicholas Murray Butler, of New York; Luther L. Wright, of Michigan; George M. Philips, of Pennsylvania; Edmund A. Jones, of Ohio; Ernest E. Balcomb, of Oklahoma.

We also recommend:

J. E. Burke, of Massachusetts, to succeed John G. Thompson for a full term.

R. L. Jones, of Tennessee, to succeed P. P. Claxton, term ending 1910.

D. B. Parkinson, of Illinois, to succeed Wm. C. Bates, deceased, term ending 1911.

A. J. Matthews, of Arizona, to succeed Theodore B. Noss, deceased, term ending 1911.

Your committee would also submit the following nominations:

For Vice-President, to succeed J. M. Green of New Jersey, Wm. M. Davidson, of Nebraska.

Elmer Ellsworth Brown to succeed himself as member of the Executive Committee.

For vacancies on Committee on Investigations and Appropriations: James M. Greenwood; Frank A. Fitzpatrick; and Elmer Ellsworth Brown, to succeed themselves for a term of three years.

Respectfully submitted

J. M. GREENWOOD, *Chairman*

CHAS. A. KEYES

JOSEPH SWAIN

I. C. McNEILL

C. G. PEARSE

A. C. DOWNING

Committee on Membership

Upon the request of President Swain, Frank A. Fitzpatrick spoke briefly and feelingly of Council Member, Superintendent Wm. C. Bates, of Cambridge, Mass. Frank A. Fitzpatrick was requested to write for the *Proceedings* a brief appreciation of the life and work of Wm. C. Bates.

George M. Philips was requested to perform a similar service with respect to Theodore B. Noss.

The Committee on the President's Address to which had been referred the recommendations of President MacLean was not ready to report. By action of the Council the committee was given power to act.

President Swain thanked the members of the Council for their courtesy to him and the promptness with which the program members had complied with the order of the Council to furnish the President with copies of their papers thirty days in advance of the meeting. No papers will be excluded from the *Proceedings* because of failure to meet this requirement.

At 4:35 P. M., July 5, 1909, the President declared the Council adjourned.

ROBERT J. ALEY, *Acting Secretary*

PAPERS AND DISCUSSIONS

PRELIMINARY STATEMENT

THE PRESIDENT OF THE COUNCIL, JOSEPH SWAIN, PRESIDENT OF
SWARTHMORE COLLEGE, SWARTHMORE, PA.

The program of the Council for this year is formed so far as possible in accordance with the action of the Council at the regular meeting last year. The number of sessions is five. We are more fortunate this year than we have been in recent years in being able to have the meetings of the Council in advance of the general sessions and department meetings, thus permitting members of the Council to be free to attend other meetings during the week. Of the six committees which reported last year there were two, the Committee on Industrial Education in Rural Schools and the Committee on Scarcity of Teachers, which presented finished reports and asked to be relieved from supplementary reports this year. The four remaining committees report today. They are:

The Committee on Provision for Exceptional Children;

The Committee on Moral Education;

The Committee on The Culture Element and Economy of Time in Education;

The Committee on Co-operation with Educational Organizations in Other Countries.

The four new topics are:

What Industrial Education Means to the Elementary School.

Rural-School Supervision.

The Adjustment of Our School System to the Changed Conditions of the Twentieth Century.

The Administration of Public Educational Systems.

These questions are selected from many excellent questions suggested by

members of the Council to whom the President is greatly indebted. They are all living topics, worthy of special investigation by a committee of the Council. From suggestions that have come to me from many sources, the time seems ripe for the appointment of one or more committees for such investigation of one or more of the topics named, or of some special phase of these or related topics. For example, there is a widespread interest in industrial education or vocation schools. There is a great need for careful study of this topic by the best committee obtainable. Many committees have been at work in different parts of the country along this line, and such a report as might be made under the direction of a committee appointed by the Council could not but add light to this important subject. Supervision in rural schools is greatly needing a better solution. The question of the administration of public educational systems is a present issue in many states, and the adjustment of our school system to the changed conditions of the twentieth century is one of the most far-reaching questions, if not the most important, of all the educational questions of the day. I would suggest that the Council consider whether a committee or committees should not be appointed especially to investigate one or more of these topics.

The enlargement of the Council has made impracticable the custom of recent years of placing all members of the Council present on the program for three-minute speeches, if their names were not on for longer papers. There have been three suggestions made to meet the difficulty: first, to reduce the short speeches from three to two minutes and place all members present on the program; second, to divide the Council into two equal divisions and place each division on for short speeches in alternate years; and third, the plan followed this year. A postal card was sent out to each member not already on the program asking whether it was his intention to be present at Denver. These answers divided the Council into four classes: Those who said they would be present at Denver; those who did not expect to be there; those who were uncertain; and those who did not answer at all. All of the first class were asked to make three-minute speeches. There was no following-up with second inquiries as in previous years.

The committees of the Council this year have been greatly hampered because there were no funds available from the National Education Association for the necessary expenses of investigation. It is to the credit of the various committees, however, that these committees have proceeded without funds or have secured help, in some cases, from outside sources. The Committee on the Provision for Exceptional Children and Moral Education may be able to secure assistance from outside sources, and will report a plan for co-operation with outside organizations. The lack of funds to carry on properly the needed investigation by the committees of the Council emphasizes the need of greater appropriation by Congress to the National Bureau of Education. If this Bureau had ample funds so that a corps of trained specialists could be permanently employed and a large special appropriation made for educational

investigation, it would be possible for the committees of the Council, thru co-operation with the Bureau of Education, to secure much better results. The Congress of the United States has of late given indications of growing confidence in the Bureau of Education. It has increased the salary of the Commissioner twice within the past two years, a very unusual proceeding, bringing that salary up to five thousand dollars for the year 1909-10. It has added one hundred thousand dollars to the appropriation for education in Alaska, made a special appropriation of twenty thousand dollars to bring the annual reports of the office up to date, and added twenty-five hundred dollars to the regular appropriation for the annual report of the year 1909-10. For the same year it has made provision for the new office of editor of the United Bureau at a salary of two thousand dollars, and for two additional clerks, making the total increase in the general appropriation for the Bureau for the coming year seventy-two hundred dollars. At the same time the internal reorganization has increased its power to render practical services even with relatively stationary appropriations. This reorganization has largely taken the form of the building-up of a corps of trained experts in the library division and the rearrangement of the library collection for daily use, the revision of the schedules in use in the statistical division, bringing of the annual report up to the earliest practicable date of publication, the reduction of its size, and the revision of its contents, and the issuance of a bulletin containing timely educational information. Important working connections have been established with the Library of Congress and the office of the Census. The Bureau has been brought into unusually close relations with the educational officers of the several states and with education libraries thruout the country. On the whole, it has been prepared to make a progressively better use of its appropriations, and Congress, as is shown above, has begun to increase those appropriations. On the other hand, the demands which are coming upon the Bureau are much greater than can possibly be met with such slight increase of appropriations as has thus far been made, even with most economical and efficient internal management. The disproportion between the work expected of the office and the resources provided for it is so great as to be positively grotesque. The National Council of Education, in particular, has need of much larger assistance than the Bureau can render in the carrying-on of such investigations as it has been obliged to forego for lack of funds. On the recommendation of the National Council a committee of five members of the National Education Association has, during the past year, carried on an active campaign to secure the needed increase in its appropriations. This committee was undoubtedly responsible in part for such increase of appropriations as has been secured during the past year. With the effort it has made it is fair to expect that the same committee, working in unison with the Commissioner of Education, can secure a much larger increase during the coming year. It is greatly to be desired that this campaign should be continued until the Bureau is put into a condition to render the services which the educational interests require, as that need is viewed by the

National Council of Education. I recommend that a committee of the Council of the National Education Association be appointed to co-operate with the United States Commissioner of Education in urging Congress to increase largely the appropriation to the Bureau of Education to enable the Bureau to employ more educational experts and conduct much-needed educational investigation.

In closing, I wish to present for your consideration the following:

QUERIES

1. Should there be any committee or committees appointed for thoro investigation of any of the new questions under discussion in the program of this Council?
2. What suggestions has the Council to make concerning the number and method of selecting members to be placed on the program for three-minute speeches?
3. Should the Council ask the President of the National Education Association to appoint a committee to co-operate with the United States Commissioner of Education in urging Congress to increase largely the appropriation to the Bureau of Education, and thus enable the Bureau to employ more educational experts to engage in much-needed investigation?

SUPPLEMENTARY REPORT OF THE COMMITTEE ON PROVISIONS FOR EXCEPTIONAL CHILDREN IN PUBLIC SCHOOLS

I. *THE CARE OF THE DEAF AND BLIND IN THE PUBLIC SCHOOLS OF MILWAUKEE*

CARROLL G. PEARSE, SUPERINTENDENT OF SCHOOLS, MILWAUKEE, WIS.

I regret the absence of the chairman of the committee, who was to have made the preliminary statement for this discussion.

The report of the committee was made one year ago, and not a great deal of work has been done since that time. No funds of the association have been available for meetings and the work of the year has been carried on chiefly by correspondence.

The committee, in beginning the consideration of this question, divided all pupils into two classes—children who are normal and those who, for any reason, are non-normal.

Many non-normal children are unfit to attend public day schools and must be educated by private instructors or kept under institutional care. But there are several classes of children whose departure from the normal type is not so great but that they can and ought to receive their regular education in the public schools, attending regular classes so far as possible, and meeting and mingling daily with the other children of the school. This plan permits them to remain in their homes where they enjoy home privileges and receive the care and training which only the home can give. They are saved from that separation into a special class which tends to render them unable to mingle comfortably thruout their adult lives with the average people about them, and does much to keep them from forming a class apart, dependent upon special conditions and

advantages for their self-support and perhaps dependent upon special means of communication with each other. Their dependence upon this special means of communicating their thoughts has also a very powerful influence in keeping them separate, both in feeling and in fact, from the people about them.

I have been asked to speak chiefly about the schools for the deaf and the schools for the blind conducted in connection with the public day schools in the city of Milwaukee.

Many years ago the Wisconsin Phonological Society organized a day school for deaf children. These children were able to live in their homes, come daily to school as other children did, and receive there that special form of education which enabled them to learn the art of speech, and also the art of reading the lips of those who spoke to them so that they might not only speak to other people but understand what was said to them by others.

The pupils in this school were taught wholly by the so-called "oral" method. They were not taught to communicate with each other in any other way, or allowed to depend upon any sign or manual language for communication among themselves. They talked to each other as they did to hearing persons.

Some years later, the legislature of Wisconsin passed laws by which the public school board of Milwaukee was authorized to take charge of this school for the deaf as a part of the public-school system. The state at that time allowed from its public funds the sum of \$100 for each child in average daily attendance in such school for the deaf. This money was paid by the state treasurer to the treasurer of the school district of Milwaukee. Additional legislation has provided that other cities in the state may establish these day schools for the deaf when a sufficient number of such children of school age are found in the community. The amount contributed by the state for the instruction of such children has also been increased, and for several years past the sum of \$150 per year has been allowed for each child in average daily attendance, and paid by the state to the school district maintaining such a school.

These deaf children in Milwaukee, and usually elsewhere, are brought together into a centrally located school, where the peculiar methods necessary for their instruction can be employed without disturbing other pupils or classes. They can in this way, too, be better classified and more advantageously taught. The day school for the deaf in Milwaukee now enrolls about eighty pupils. These children use the same textbooks, recite the same lessons, and complete the same work in the various elementary grades that the children in the regular classes complete. Somewhat more attention is paid to manual training and physical culture.

Upon completing the studies of the eighth grade, the pupils of the school for the deaf are, at graduation time, able to speak from the platform, render declamations, read their graduation essays, converse with visitors, and otherwise take part in the exercises of the day.

A number of them, after completing the eighth grade, have entered the high school. They are gathered into one of the high schools where a teacher is provided who acts as their helper in their studies; but the children recite to the regular teachers in the regular classes with hearing pupils.

For several years the need of a day school for blind children, similar to the day school for deaf children, has been felt in Milwaukee. Some two years ago, the Board of School Directors by vote decided to establish such a school as part of the public-school system. In November of 1907, this school was established with seven pupils. In a little more than a year and a half the number of pupils in attendance has increased to twenty-five and the number of classes to three.

At the session of 1907, the Wisconsin legislature passed an act authorizing payment by the state, to each school district maintaining a public day school for the blind, of the sum of \$150 for each such child in average daily attendance in public day schools for the blind. The classes for the blind in Milwaukee are conducted under this law; and one other city in the state—Racine—has organized a public day school for the blind.

The pupils are brought together in centers in different parts of the city. Rooms in the public schools are fitted up for their use and special teachers are provided for the classes. Special facilities are furnished in these rooms in the way of "slates" and typewriters on which the children write their lessons, and such other materials as are needed.

The point system of letters is used, the American Braille being the system selected.

The children study in the special room, under the charge of their teacher; but at recitation time they go to the different classrooms, according to the grade of advancement, and recite in the classes with children who see, taking their part in the recitation in turn, reading or spelling or solving the problems in arithmetic or answering the questions in geography. They play with the other children at recess time, the children who can see taking great interest in them and showing a willingness to help and care for them.

The blind children usually come to the centers on the street cars, altho a few are brought in conveyances by their parents. Sometimes the children are put upon the nearest street car by the parents and are put off by the conductor a block from the school, walking that distance by themselves. At the close of school, they are put on the car by some child who can see, and are put off by the conductor at the point nearest home. Sometimes a child, living near the home of the blind child, becomes a guide. He takes his blind companion to the car, gets on with him, rides to the school, takes him to the room where he belongs and enters the regular classes of the same school as a pupil, being given a permit to attend outside of his own school district. In the evening he takes the blind child home. Sometimes this little guide is paid by the parents of the blind child; sometimes the service is merely a labor of love.

Within a year from this time (July, 1909) blind pupils will be graduating

from the eighth grade, having done the regular grade work up to that point. Some of these are planning to attend the high school where a teacher of the blind will probably be assigned for their special help. They will, however, recite in the regular classes, as the deaf children in the high schools now do.

II. THE SYSTEMATIC CARE OF THE EXCEPTIONAL CHILD

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The subject of the exceptional child is one of growing interest to the country as a matter of civic need. There is no argument needed to prove that the state must provide education for every child, to render him self-supporting and as intelligent as possible in his relations as a citizen of a self-governing republic. It is now fairly well recognized that a purely intellectual education, universally administered, does not accomplish this end. Instead, it sends some children out poorly prepared for life and citizenship, and filled with a hatred of the law which has kept them in school—two influences destructive of the respect for law, which is a basic element in self-government and our democratic institutions, without which we shall need an armed force to secure obedience to law.

The effect of this educational failure upon our civic needs is also to be estimated in geometric proportion. It has finally come to be known that there are exceptional children, incapable of adaptation to ordinary courses of study, ordinary methods, and ordinary school conditions.

Since the recognition of the need is general and the classification of types is accomplished, there remains the task of meeting the need by providing educational instrumentalities adapted to the training of each type of exceptional child, so that all may reach the end of the highest possible social and civic service.

That is my subject today: "The Systematic Care of the Exceptional Child." A careful investigation for four years, by correspondence, by discussions in interviews, and by personal visits to the schools of the four largest cities in the East, makes inevitable the conclusion that altho everybody is busy, teachers are devoted and earnest, and much money is being spent, it is nevertheless unorganized labor. It is ill-directed energy, and lacks system and co-ordination. My plea, then, is that the first steps in systematic care of the exceptional child must be systematic study and dissemination of the knowledge acquired from study and experience.

In hopes that the Council will give its committee power and means to investigate, co-ordinate, and organize what is being done or can be done for each type of the exceptional child, including the mentally defective, the delinquent, the physically disabled, I venture to make some suggestions for such a study.

First: The causes which have differentiated from the majority these children called exceptional. Some of these causes we speak of very glibly; but who of us knows just how, or why, or to what extent any one of them is responsible, or in what way any one of them is remediable or removable? Certainly filling institutions with defective children and prisons with delinquent youths will not remove the causes, nor is it an economical way of removing the evil results. These children are not necessarily institution cases, and to place them in an institution is a great wrong. They do not get along well in the ordinary graded classes, of course, because the teacher must consider the good of the majority, and, having large numbers to care for, she cannot spare time to give such children individual attention, even if she is capable of dealing with the problem. But in all cases, they need the active positive help of a good teacher, in surroundings that are as nearly normal as possible; and they need to be made self-dependent, not shut out of the life of the home, but meeting the buffets of the world as evidenced in miniature in the life of the street. I am glad to find I am sustained in this opinion, which has always been my belief, by the findings of the recent conference on dependent children, at Washington.

What is the use, then, of knowing in a general way that delinquency or defectiveness is in the majority of cases due to this, that, or the other cause, unless we know, or can find out, specifically, the relation between the cause and the effect? What we want is a systematic, statistical study of each, in the manner of some of the recent investigations of the Russell Sage Foundation, the causes needing investigation being, in the order of their present apparent importance: (1) home surroundings: low, degraded homes; poverty-stricken homes; unhappy homes, constant strife; lack of parental care and control thru misunderstanding, indifference, negligence, despair; step-parents; (2) street influences: fagins; gambling; small candy stores, with slot machines, indecent postals, and back rooms for lounging; smoking; (3) personal characteristics: physical condition; nutrition; personal peculiarities of appearance or temperament; (4) psychological influences: the "in-between" age; ages and grades of school life; individuality in development; (5) heredity and prenatal influences; (6) social influences: housing; neighborhood conditions; racial habits, traditions, etc.; religious training.

Second: Terminology. The lack of organization in our work with the exceptional child makes itself evident in our careless terminology. For illustration, in no two of four large cities—Boston, New York, Baltimore, and Washington—does the term "ungraded class" mean the same thing. It seems to me that an important, if not vital, factor in organization of our work with the exceptional child is the arriving at some agreement as to terminology.

Third: A study of the subsequent career. This should include a study of the child's employment and his later character; a study of ways and means by which knowledge of the subsequent career may be discoverable, and illustrations and statistics to verify the value of the special, individual care given the exceptional child.

Fourth: Records and reports. In this, as in terminology, there seems to be little or no uniformity. The data of reports made in one city, or even of schools in the same city, do not have any resemblance in completeness; and the records of schools, institutions, and courts do not coincide or give any indication of the correlation there must be in their work if we are to give systematic care to the exceptional child, particularly the morally exceptional. From study and comparison, we must arrive at plans for record-keeping and a knowledge of data on which to base methods of treatment and care.

Fifth: The curricula and methods of teaching. The systematic care of the exceptional child must mean definite, actual, specific teaching and training, according to an organized plan of exercises, with methods and materials intended for the correction of specific faults and needs. And it must be just as definitely organized and specifically taught in physical and moral training as in intellectual or in manual training.

Physical training.—In my own work, and according to beliefs and theories

justified by four years of actual experience with almost six hundred exceptional boys, I give first rank in importance to physical training. The physical training of the exceptional child should be in charge of a special teacher, who must have a thoro knowledge of the relation between his exercises or games and the child's physical defects, and a good working knowledge of physiology and anatomy so that he can recognize the defects and the signs of their improvement or deterioration. There should be close correlation between the work of the teacher in physical training and the reports of examinations by a physician.

The teacher must remember that the exercises are to be definitely corrective, either for the development of what is defective, or for the removal of developed errors. In addition to the corrective exercises in physical training, there should be planned a course in hygiene and simple physiological facts bearing on moral prophylaxis. I do not mean a graded course of instruction, but one arranged to teach the dangers of specific errors and defects. This is not only needed, but is accepted, with good effect, by the older boys of the morally and physically exceptional types.

Moral training.—Just as essential is definiteness in systematic planning for moral instruction of the exceptional child. I do not mean preaching, or lessons labeled ethics, or moral instruction of any kind which makes known to the child that he is "being done good." If you know Edward B. Lent's "Being Done Good," you will appreciate the applicability of the phrase to the child who is aware that he is being taught or preached at to be "good." Yet to the teacher the work should be conscious and definite in course and method. Again I do not mean one that is graded by years and school terms, but a course of instruction systematically planned, to be corrective of specific immoralities, and unmoralities, and to be used by any and every teacher who finds need. The method to be employed includes the telling of stories and the conducting of discussions somewhat after the fashion of Mrs. Cabot's "Every-Day Ethics." It should closely, but tactfully, bear upon some recently committed wrong-doing—tactfully, because it has an evil effect upon a young sinner to make him adorn a tale and point a moral.

The chief sources of moral training for the exceptional child are the establishment of habit and the use of preventive means. Beguile him into doing right; into coming to school regularly; "jolly" him; "bluff" him. After a time the thing he has been led into doing becomes a habit, and, after all, most of us are good or bad because of habits established years ago, and probably unconsciously.

The various exercises to be used, the habits to be trained, and the wrong interests and habits for which right ones are to be substituted, the privileges, forms of reward and commendation—all these must be systematically planned and systematically adhered to. It seems to me that in the planning of these, and of a course in ethics such as was earlier indicated, we have a fruitful field for study and investigation, as well as report and suggestion.

Manual-industrial training.—The next most important phase of work

with the exceptional child is the manual-industrial training. I have hyphenated the term because the training must be both manual and industrial. It must train for the trades, and it must give manual ability. We have had the manual without the industrial, and it is just as possible to reverse the situation. Therefore this word of warning.

The reasons for this phase of the work need no enlargement to teachers of any experience with the exceptional child. Since he will not and cannot yield himself to the intellectual culture that has so long been our ideal, we must substitute that which does appeal, partly because of his natural interest and curiosity, partly because of its motor element, and partly because of the utility he sees in it.

What we do need is information, and classification of the forms of work, types of exercises available for school use in each, the methods of presenting each, and the values of each—all specifically related to the various types of exceptional children. Have we not here a subject of prolific interest for investigation?

Besides definite planning, several other points must be kept in mind in regard to the manual-industrial work: (1) The articles made should be of real size and selling value; (2) the child's special interest, once discovered, should be developed even to the exclusion, later, of some other form of manual work; (3) the teacher must aim for accuracy of accomplishment, but we must remember that these are *exceptional* children. The piece of work which may fall far short of perfection, as a completed article, may yet represent the highest kind of success as indicating the activity and development of the child.

Intellectual training.—Finally, we reach the consideration of the amount and kind of intellectual training to expect of the exceptional child. The course of study must be a flexible one, and should contain, as absolute requirements, only the essential subjects, and even of them, only the essential, elementary facts. The teaching of geography, nature-study, and science should be in relation to and in connection with the materials used in manual-industrial work. The methods to be employed will necessarily include group work and individual instruction. The proportion of time to be devoted to these various phases of work, in a school day of five hours, is: one-fifth physical training, hygiene; two-fifths manual-industrial training; two-fifths intellectual and moral training.

Play and recreation activities.—The systematic care of the exceptional child includes an interest in and investigation of his activities outside of school hours, and the planning of some kind of provision for them, so that the effect of days of hard teaching will not be destroyed in one afternoon or evening of evil companionship. The usual provisions for children outside of school hours do not meet the needs of the exceptional child. Either they fail to interest him, and therefore he ceases to attend, or he is troublesome and refractory and in consequence is sent out from the settlement and club. Hence the systematic care of the exceptional child must include planning for the employment of

teachers and the arrangement of playground and recreation activities after the school hours have ended, under other teachers possibly, but all under the guidance and direction of the one responsible principal or teacher in charge of the school or class.

With this brief statement of these most important phases of the systematic care of the exceptional child, I close.

III. ABNORMAL CHILDREN—THEIR CLASSIFICATION AND INSTRUCTION

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(An Abstract)

What constitutes an abnormal child is, at least in a gross way, rather generally apprehended. But even if we are partial to scientific niceties, we may accept as fairly inclusive De Moor's statement that "the abnormals are those who are afflicted with anything whatsoever that unfavorably affects their lives in relation to the social medium in which they live." Under this rubric, then, are included the deaf, the blind, the crippled, the mentally defectives, and the mental aberrants, those handicapped by sensory or constitutional defects, and those children whose home and social environments have been such as to hinder a symmetrical physical development or mental and social growth.

The blind, deaf, and cripples.—The problems offered in the teaching of the blind, the deaf, and the cripples are severally unique in themselves, and extremely specialized. In the instruction of the first two classes, the blind and deaf, specialized forms of methodology and school exercises are necessitated, such forms as are effective in circumventing the sensory handicaps under which these children labor.

With crippled children, only such modifications in the orthodox curriculum seem necessary as are required to meet the peculiar individual needs of certain of the children; physical exercises for paralytics, attention to the comforts of those who are tubercular, etc. If taught in public day schools, some provision must also be made for their transportation to and from school.

The subnormals as to mentality.—The problems with regard to the teaching of children of subnormal mentality are intricate and vexing, and these are the ones with which we shall concern ourselves here chiefly. To project educational instrumentalities for classes of children so widely distributed on the mental scale as the idiots at the one end and those only slightly retarded at the other, and to order an efficient methodology for each class presents a problem not easily encompassed.

Were all kinds of mental abnormality but manifestations of different degrees of mental retardation or delayed maturity, as Sequin, Ziehen, and others hold, or were the arrested development symmetrical for the different mental functions in all individuals, instead of extremely eccentric, as typically occurs,

school exercises might be outlined which could be graduated quantitatively to the different levels of mental ripening. The educational régime suited to the several grades would thus need to differ in degree only, and not in kind. But instead of one agent or factor being responsible for mental defect, the number recognized is manifold. Some children are consequently found to be good in perception, others in memory, others in power of attention, others in initiative and practical invention, but strikingly deficient in other lines.

Again there is prevalent, even among those dealing intimately with mentally afflicted children, the misconception that they naturally divide themselves into types or groups and that in each type the children possess certain exclusive mental traits and physical signs which easily differentiate them from those of another type.

But type and homogeneity as applied to the mentally defectives are largely speculative and theoretical terms. If employed at all, the term type must be understood to refer to some point in the curve of the general distribution of children, only, a level which has been arbitrarily restricted in its connotation and extent to serve some practical end solely. There is no such thing as a well-marked limen that separates the normal from the subnormal, or one class of the exceptionals from another. Scientific investigation has shown that the mind of the normal child differs from that of the idiot not altogether in the possession of certain mental qualities, which the latter lacks, but especially in a relatively more complete development of the mental functions, and particularly those of the higher order, on the part of the former as compared with the latter. To suggest a uniform system of school exercises for children of all degrees of subnormality is therefore obviously both unpedagogic and unpsychological.

Were a pedagogical procedure to be ideal, therefore, it should seek to adapt educational agencies to the psychological individuality of each particular child. But such is perhaps still far from possibility of attainment in the present untrained and unspecialized state of our teaching force. The same pedagogical ends can be reached approximately, however, if the special teacher can be given expert guidance. A systematic and scientific classification of the children under the special teacher should be made, and she might be given a cataloged account of the predominant mental traits and capacities which are characteristic of the several mental levels discovered, and the school exercises that are best adapted in each to stimulate and promote a wholesome intellectual and social growth.

About as much as may with reason be expected from our teachers themselves is that they be adaptable, alert, enthusiastic, and that their training has been such that they are able to suit educational exercises so as to conform to the needs of a few types or classes of children which have been selected and defined for them. Our teachers, in fact, ought to be pedagogs, and not psychologists. Indeed, I believe that the possession of a true scientific instinct and insight largely unfits a teacher for the most effective instructing. A cold, deliberate, analytical way of looking upon the child and his mental equipment cannot but

tend to smother and extinguish that kind, patient, sympathetic, persevering spirit which should permeate all teaching. And with those unfortunately gifted, above all others, sympathy, with an active enthusiasm, is the magic that begets in them a spirit of co-operation, personal initiative, and self-expression—the keys to their mental unfoldment. But our best teachers, almost uniformly, are crying for a more serviceable classification of those whom they must teach.

There is a considerable number of historical classifications of subnormal children, but they have been projected for the most part by those whose interests lay in removing pathological defects or grouping patients for custodial and hospital purposes, so, unfortunately, they do not answer well for educational ends.

For pedagogical purposes the point of view obviously must be dominated very largely by the character and degree of the mentality of the children under treatment. A classification should take into account a child's capacity for mental activity, his adaptability to social influences, his efficiency in responding to novel and untried experiences, the tenacity of his purpose, the span of his effort, the character of his attention as regards fluidity or stability, his spontaneity, his ability to render judgments of relative quantity, his capacity for abstracting qualities or dealing with general relations, his facility in reading meanings into situations, and his susceptibility to training thru symbolic language, that is, his possibility of instruction thru the orthodox school media. But no matter how elaborate and inclusive the mental analysis which a diagnostician may make, it is not how the mind habitually or overtly functions which must form the criterion as to a child's place in the intellectual scale, but his possibilities for improvement under training, and hence his future promise of social adaptability and service.

With the above in mind, I shall offer a classification of children which has proven to be fairly practical and effective from the viewpoint of public-school instruction. I shall also add certain pedagogical agencies which have been employed in training the several classes, and which have served not only to prevent further arrest but to stimulate growth, activity, and social adjustment.

Time fails me to outline and demonstrate, even in brief, the distinctive tests and methods which are employed to measure the degree of maturity of a child's various mental functions, and the individual child's place in the general distribution of children of the same age. We shall have to content ourselves, therefore, with a limited catalog of the mental traits which scientific tests and observations justify us in attributing to the several typical groups.

For indicating classes and types we are rather unfortunate in possessing no satisfactory terminology. Such stock names as idiot, imbecile, subnormal, and backward refer to inadequate, indefinite, and, indeed, antiquated divisions, which have wholly outgrown their historical functions and value. Some of the terms require clarification and elaboration; the use of the others should be wholly abandoned.

For instructional purposes it has been found practicable to divide sub-

normal children into the following groups or mental levels: Beginning with the lowest and proceeding upward we have: (1) the idiots of the first and second degree; (2) the imbeciles; (3) the infantiles, comprised of the higher order of the imbeciles and the lower levels of the typically retarded; (4) the typically retarded children; (5) the pedagogically backward; and (6) the morally abnormal.

Idiots of the first and second degree.—With these children and the next class—the imbeciles—the public school is not concerned. The idiots belong to the lower perceptual levels, and indeed, some are even lacking in power to accumulate sensory and perceptual experiences. Attention is fluctuating or absent. The memory and imagination are defective, and there is discovered an almost total absence of abstract ideas or ability to transfer experiences from a given situation to others somewhat comparable. Language is normally imperfect, frequently monosyllabic, and sometimes absent. This defect comes about not only by reason of the absence of ideas but also thru lack of motor control.

The education of the idiots must proceed largely along the lower planes of habit, and particularly with reference to the formation of the large, gross, motor habits. Some may be taught to pursue extremely simple occupations, to care for their bodily necessities, and to look after their own personal hygiene. Others are too low to be taught even such simple habits. Results of instruction in the orthodox school instrumentalities, too, have been almost invariably negative. This class of children calls for institutional provisions, i. e., custodial care and surveillance.

The imbeciles.—At this level, perception is active but superficial and inaccurate; attention is still fluid; memory, poor; imagination, unclear but frequently active. The imbeciles are normally in possession of a sufficient number of concrete ideas, but they possess little ability to generalize their experiences. Language is fairly complete, but mechanical, words being devoid of content and inherent significance. They are lacking in ideals or motives for behavior, are not dominated by ultimate ends or purposes, are insusceptible to moral influences, and are not guided by reason. Frequently they may be taught to read and write, but this training proves to be superficial and impractical. They can be made to learn the simpler trades and occupations, and to direct their conduct when it has been trained into habitual channels. Their minds differ from the normal child, not in the absence of certain traits, but only in a relatively lesser development of the higher functions.

Morally, moreover, imbeciles are unstable and unreliable; hence they are institutional cases and call for custodial care.

The infantiles—comprised of the higher orders of imbeciles and the lower grades of the typically retarded.—These are children who are found to be fairly acute perceptually, especially in apprehending such concrete sense impressions as possess elements of personal meaning. They are able to carry simple meanings in terms of symbols, and consequently can be taught to read, write, and perform simple practical operations in numbers. Their reading, how-

ever, is very mechanical and their apprehension of meanings, as gleaned thru printed symbols, is limited to simple sentences that relate to familiar common experiences. They do not, of course, comprehend abstract number or moral precepts. They are predominantly sensori-motor, that is, experiences are reacted upon directly, and most impressions pass over immediately into some form of motor activity. Their interest, too, lies chiefly in manipulation and in the dramatic, and it is from these dominant traits in their mental make-up that successful teaching takes its cue. The activities which have been found most successful in arousing mental response consist of diverse forms of motor expression, such as dramatic games, physical-culture exercises, manual tasks, and the ordinary social duties. This type of children is being successfully instructed in special classes in the regular schools, and at the age of sixteen they find employment, for the most part, where with some sympathetic direction they are able to earn a livelihood. They rarely, however, become independent social individuals.

The typically retarded.—These are children whose gross anatomical structure appears to be perfectly normal at school age. Neither are there apparent any overt evidences of anything that would differentiate them from the ordinarily normal child of the school. But their whole life-history, almost invariably, gives indication of arrest. Walking and speech are acquired later than normal, and the secondary reflexes function automatically, often until the age of five or six. Altho the larger fundamental muscles appear to be under good control at school age, so that the child usually stands and sits erect and walks well, the secondary peripheral muscles show a striking lack of maturity and co-ordination.

The mental development in the typically retarded is ordinarily found to be fairly symmetrical. Indeed, looked at from the viewpoint of their psychological and physiological ages, instead of their chronological, their mental activities are well balanced and normal. They must be thought of as children much younger than their years and bodily proportions would indicate. Fortunately too, unless still further depressed and retarded by a pedagogical régime suited to the more matured, the typically retarded children grow into relatively normal adulthood. They become socially and economically independent, and hence their training logically should come under regular public-school provisions. The educator's task lies in determining the age-level, in each instance, which the retarded child has reached, and then adapting for him a modified form of the school exercises which children of that age normally pursue. But by reason of their mental divergences, extreme reticence, and frequently mercurial or sluggish attention, due largely to faulty home training, they demand such special school facilities as are provided in what are known as subnormal class centers, where, with a limited membership, the teacher finds opportunity to study their individualities and appeal to their several personal interests.

Backward children.—The backward are children whose physiological development has been normal, but who are pedagogically retarded. Their

mental traits and functions when tested by ultra-school devices are found not to diverge significantly from the average of their ages. Yet they are unadaptable by reason of a paucity of well-grounded habits and attitudes, such as children in school normally acquire. The pedagogical régime suited to train them efficiently, however, need not differ from that normally obtaining in other regular classes, except that the methods should be modified so as to appeal to maturer interests. These are the children who congest the lower grades. One or another of the diversity of functional disorders which particularly afflict growing children depletes their vitality, consumes their energy, and shuts them off from the great wealth of sensory experiences and communicable information to which the child not so handicapped is heir, and the inevitable result is that these children are unable to articulate normally into classes with their fellows. They fall behind, lose interest and enthusiasm. In consequence they become either truants and incorrigibles or dullards, depending largely upon their temperaments and social heritage.

Coaching classes have been found serviceable in handling these cases, as have also school organizations so elastically conditioned that children of varying mental attainments may progress thru the school course at different rates of movement. Such a coaching program as obtains under the Batavia system ought also to prove valuable.

Morally abnormal.—With reference to this class, little can be said. Not enough is accurately known of the complexity of mental functioning or the peculiar aberrant traits which the morally unsound exhibit to suggest any departure from the orthodox methods of treatment which these classes ordinarily receive. May I add, however, that we are attempting to collect data with regard to delinquent children in Chicago which we hope will throw some light upon the corrective treatment necessary to bring them back to normal social habits of life.

From the foregoing it is quite apparent that a classification of children is far from simple. Indeed it is a matter which calls for specific and expert training along the lines of children's normal mental unfoldment, as well as peculiar skill in tracing such divergences in mental functioning as may occur by reason of sensory handicaps, and lesions arising from diverse afflictions and abnormalities due to peculiarities of inheritance and eccentric development. It is a task, indeed, which only the psychologist specially trained in the mental abnormalities of children may hope successfully to encompass.

IV. PROVISION FOR EXCEPTIONAL CHILDREN IN THE PUBLIC SCHOOLS OF ST. LOUIS

BEN BLEWETT, SUPERINTENDENT OF INSTRUCTION, PUBLIC SCHOOLS
ST. LOUIS, MO.

I was asked by Superintendent Van Sickle to say what I could in ten minutes about the history of these schools in St. Louis.

The necessity for the establishment of these schools was emphasized in St. Louis as it had been in other places thru the conditions forced by the adoption of a law compelling attendance.

In June, 1906, Superintendent F. Louis Soldan discussed in a report to the Board the new problems presented thru the natural action of this law, and made recommendations covering the care of defective children and defining the scope of that term.

The report of the Committee on Provision for Exceptional Children, made to the Council at the Cleveland meeting in 1908, gives Superintendent Soldan's plan for housing the schools for these children, the selection of their teachers, and the mode of transportation of the pupils.

During the school year 1906-7, it was necessary to make preliminary investigations to ascertain the number of children who should be thus taken care of and to decide the location of the schools. At a meeting of the principals, the superintendent explained what was proposed and, subsequently, blanks in the following form were distributed to the principals to be used in making reports on the individuals:

PUBLIC SCHOOLS OF ST. LOUIS

PRINCIPAL'S REPORT ON "DEFECTIVE" CHILDREN

NOTE.—Principals will consider the receipt of this blank a request to examine carefully and personally every "defective" case in their school and to send a report within three days. They will use one of these sheets for each pupil on whom they desire to report.

If, after proper inquiry, the principal finds that there is no case of this kind in his school, he will state so in this blank and return it promptly.

The term "defective" as used in this case applies to children that are neglected by nature and constitutionally incapacitated for the ordinary studies, but may nevertheless be able to profit by instruction that is specially adapted to them. Imbecile or mentally unbalanced children require the watchful nurture of an asylum and cannot be benefited by school instruction.

Principals will find a full discussion of this matter in the Proceedings of the Board of Education, June, 1906, page 596.

..... School. Date..... 190....

To the Superintendent of Instruction:

I herewith submit the following report on one of the pupils of this school whom I consider "defective" in intelligence.

Name of pupil..... Age..... years..... months.

Parent's name..... Residence..... Occupation.....

How long has the child been in your school?.....

How long in any other school?.....

In what grade is he at present?.....

How long has he been in this grade?.....

Number of room?..... Name of teacher?.....

For what reason do you consider him a "defective" child, in the sense of the definition above? (Give brief description of the child, noting appearance and special traits which show him to be a "defective.")

Have you any information as to the special cause of his defects (such as defective vision, etc., previous or present disease, etc.)?

Is the child simply backward or slow, but nevertheless able to do the ordinary work in reading, arithmetic, geography, etc., if enough time is given to him?.....

What part of the ordinary school work is he, in your opinion, unable to do?

Conduct of the child while in school?

The first report, made in October, 1906, showed plainly that there had been a great variation in the standards of estimate applied by the principals. Evi-

dently some pupils were included who were capable of carrying on successfully the work of the regular schools, and some were omitted who should have been included. The total number reported from the entire city was 231.

In the principals' meeting at the opening of school in September, 1907, the superintendent discussed the nature of the variations in the reports and gave typical cases in illustration of the kind of children that should be selected. Some of these types were thus outlined in a subsequent report to the Board:

EXAMPLES OF DEFECTIVE MENTALITY

In order to give an idea of the nature of the cases for which provision is to be made in the special schools, I select some characteristic examples from the lists reported last month. For obvious reasons, the following statements do not contain the name of the child. A given name is selected at random to show whether the child is a boy or a girl. The items opposite each name, however, describe actual cases.

1. ANNA.—Age: 13 years, 6 months; attended school for 3 years; advancement: 1st grade; conduct: inoffensive; general character: lacking in intellectual powers; cannot tell name of parents.

2. CLARA.—Age: 12 years; attended school for 4 years; advancement: 1st grade; conduct: source of disturbance to other children; general character: seems to have no mental power.

3. FRANK.—Age: 12 years; attended school for 6 years; advancement: 3d grade; conduct: stubborn and troublesome; general character: learns a little in abstract arithmetic but cannot retain it.

4. MINNIE.—Age: 12 years; attended school for 5 years; advancement: 2d grade; conduct: inattentive and careless; general character: five years in 1st grade and does not know as much as beginner.

5. HARRY.—Age: 10 years, 7 months; attended school for 4 years; advancement: 2d grade; conduct: good; general character: no understanding of values and numbers.

6. FRED.—Age: 9 years, 5 months; attended school for 3½ years; advancement: 1st grade, third quarter; conduct: untruthful, disobedient, and torments other children; general character: lacking in memory and reasoning power.

During the month of September, 1907, a second report was called for and after it was carefully checked over the number of cases was reduced to 181. A further canvass during the years 1907-8 and 1908-9 seems to warrant the conclusion that the number of such children in St. Louis is from .3 to .5 of 1 per cent. of the registration for the year.

On January 13, 1908, three of these schools were opened. Each was located in a detached six- or eight-room private residence which had been rearranged to accommodate two classes of fifteen pupils each, and to provide lodging for the woman employed as caretaker and attendant. In September, 1908, three additional schools of the same character were opened. There now remain about ninety of these children unprovided for.

The report of Superintendent Soldan made to the Board in November, 1907, gives the following principles as determinants in the course of study:

INSTRUCTION IN THE SPECIAL SCHOOLS

a) The instruction of children of defective mentality requires a departure from the customary work of the ordinary schoolroom. Progress must be largely individual. The education of the defective child in method and form is totally different from that of his normal brother or sister. There can be, as a matter of course, no fixed course of study in reading, writing, and arithmetic. No set task can be laid out for him, nor should he be expected to keep step with others. The schools should be so arranged that each child can learn as much of the studies of the ordinary school—reading, writing, and arithmetic—as his mentality allows and no more.

b) The training of the hand thru easy work, and thru occupations similar to those used in the kindergarten should have a large share in the education of these children. Subnormal children are, as a rule, interested in the work of their hands, and their intelligence develops thru their occupation.

c) The tone of the special school should be bright, cheerful, and encouraging; games and physical recreation should alternate with work.

d) The care of the health of the children should be made a prominent feature. The special schools should be visited regularly by a medical officer. The teacher should make hygiene and child study the subjects of her own reading and study.

e) Above all other considerations, the teacher arranging the course of education for these children should bear in mind the great purpose: to make them useful for life. Any talent for a useful occupation which the child manifests should be made use of and developed in his education.

TYPICAL REPORTS ON INDIVIDUALS

Some of the things we are accomplishing can be illustrated by three typical cases. In each case I give the memoranda of the medical adviser and the school record of the pupil's progress measured at intervals of six months. The record is given in the form of the blank provided for that purpose.

CASE NO. 1. SPECIAL SCHOOL NO. 2. VISUAL DEFECT. 11 YEARS OF AGE

Was admitted to Special School No. 2 by transfer from the Washington School, first grade, first quarter, March 2, 1908. Family history shows that his parents died when he was quite young and he was committed to an orphan asylum. He was about two years of age when his mother died. She died from a spinal disease—I am of the opinion that it was tubercular. He has two brothers and two sisters, all living and in good health. Had measles and scarlet fever when an infant. Recovery from those diseases was complete. His history other than this was negative.

A physical examination was made by me when he entered the special school. The only physical defect that I could discover was a very serious visual one. I interviewed the aunt, getting the family history, and pointing out to her the serious condition of his eyes and the urgent need of expert treatment. This advice was acted upon at once. A proper refraction was made and glasses were adjusted. The teacher noticed a marked improvement in his work at once, which continued, and at the end of thirteen months he was transferred back to the grade school from which he came, and his principal and teachers say that he is an average pupil.

CASE NO. 2. SPECIAL SCHOOL NO. 1. NEURASTHENIA. 9 YEARS OF AGE

Entered Special School No. 1 on January 13, 1908. Had never been in kindergarten or school before. His birth was premature, but was normal. Attempted to walk when three years of age. Made sounds with his voice at two years of age. At this time he was noticed to be very nervous and excitable, and when anyone spoke to him he became very nervous, his arms and hands flying about. This nervous condition continued. When he entered school eighteen months ago he had to be aided by someone in walking. Just

SPECIAL SCHOOLS FOR INDIVIDUAL INSTRUCTION

St. Louis, Mo.

Record of Progress of Case No. 1

School: Special No. 2

Name of child: _____

Date of birth: February 3, 1898

Date of admission: March 2, 1908

Date: October 23, 1908

From Washington School

	Reading	Writing	Numbers	Handwork	General Intelligence	Character and Conduct	Health
At time of admission	Could read very simple sentences from board	Sight so defective that his writing is poor	Fair	Very poor.	Good	Good	Good. Sight defective
6 months after admission	Can now read very nicely in First Reader	Writes very well now	Excellent for a 1st grade boy	Improving	Good	Good	Good. Sight is Improving
12 months after admission	Reads well and has gained power	Good	Excellent	Very good	Good	Good	Good
18 months after admission		Returned to	Washington	School, January 29, 1909			

before entering school he was operated on for adenoids. After this operation his appetite was much improved; he rested better. When he first entered school his nervousness was so marked that he had to be fed with a spoon. He could not hold a piece of chalk or a pencil, could not sit still, or could not play games, run, or jump. At this time his nervousness is much improved. He can sit still; not nearly so nervous; can walk by himself, and runs and plays games with the other children; does some little number work; recites memory gems. He speaks so anyone can understand him and is much better than when he entered school. All in all, he has improved at least fifty per cent. With the proper care his case promises much.

SPECIAL SCHOOLS FOR INDIVIDUAL INSTRUCTION

St. Louis, Mo.

Record of Progress of Case No. 2

School: Special No. 1

Name of child: _____

Date of birth: September, 1899

Date of admission: January 13, 1908

Date: February 1, 1909

From Madison Kindergarten

	Reading	Writing	Numbers	Handwork	General Intelligence	Character and Conduct	Health
At time of admission	Absolutely nothing. No control over body	No use of his hands	No idea of them	Nothing. Could not use his hands. Almost helpless	Vague	A slight remove from infancy	Nervous and feverish
6 months after admission	Reads from black-board	Writes a little. Has improved very much	Nos. 1-12. Can count thru 12	Beginning to control	Understands and concentrates	Very much improved	Has improved in controlling good will
12 months after admission	Reads from book and black-board. Spells	Writes words from copy and memory. Wonderful	Nos. to 100. Reads and writes them improvement	Has improved very much in strength	Very capable and endurance	Mischievous and curious	Has improved in controlling nervous twitching
18 months after admission							

CASE NO. 3. SPECIAL SCHOOL NO. 1. MALNUTRITION. 11 YEARS OF AGE

Entered Special School No. 1 on January 13, 1908. His family history was hard to obtain. He is an illegitimate child of a feeble-minded mother, and his condition was a simple case of malnutrition. All his organs normal. His environment is very bad. Since entering school he has been fed at least one substantial meal per day by the teachers and has improved wonderfully. It is the intention of his teacher to recommend that he be transferred to the grade school from which he came.

SPECIAL SCHOOLS FOR INDIVIDUAL INSTRUCTION

St. Louis, Mo.

Record of Progress of Case No. 3

School: Special No. 1

Name of child: _____

Date of birth: 1899

Date of admission: January 13, 1908

Date: February 1, 1909

From Madison School

	Reading	Writing	Numbers	Handwork	General Intelligence	Character and Conduct	Health
At time of admission	Knew a few words A beginner in	Could write a few letters this school	Knew very little	Could do nothing	Vague	Gentle and obedient	Not the best. Lack of food
6 months after admission	Read from board and from book. Spells	Words improving	Nos. 1-12 combinations	Learning to weave	Beginning to understand	Gaining confidence. Lazy at times	Improved
12 months after admission	Reads from book and spells fairly well Has improved	Writing of stories fair very much.	Nos. in hundreds. Add—less—times—divided. Curious, seeks	Weaving and making information	Concentrates and quite capable	Able to hold his own in all cases	Always well Never absent
18 months after admission							

The cost per pupil per year for teachers, books, supplies, and incidentals, including rent, has been \$130.00.

At the end of the year and a half of experience we know very definitely that we have helped most of the pupils to a healthier, happier life. We know just as definitely that we have been only feeling our way, and that there must be a much closer diagnosis of the individual case by one specially trained to see the defects of the mind and the physical causes of these defects; if we are to be at all sure that our plans are intelligently shaped. I do not believe, however, that because it is impractical for a city school system to maintain an equipment that Dr. Witmar has found necessary for the treatment of the limited number of pupils in his care, that the cities are unwise in undertaking the work.

What we do even with our inadequate preparation for this highly specialized work is worth what it costs both in money and thought because of the good it actually does the defectives, and because of the relief it affords the ordinary school classes.

V. PROVISIONS FOR EXCEPTIONAL CHILDREN IN THE PUBLIC SCHOOLS OF BOSTON

STRATTON D. BROOKS, SUPERINTENDENT OF SCHOOLS, BOSTON, MASS.

In considering the necessity of providing for the separate instruction of exceptional children, it is customary to base the claim upon the rights of these children to receive suitable instruction and upon the benefits accruing eventually to the community from the proper education of such children. It is probable that equal emphasis should be given to the benefits accruing to the regular classes from the removal of exceptional children therefrom. The nervous strain that two or three such pupils may cause a teacher is enormous, and their presence consumes energy and vitality that could with much greater profit be given to the other children in the room. The nervous shock to young children caused by the presence of epileptics, for example, is highly detrimental, and even with milder cases of physical peculiarity the imitative habits of children are likely to produce conditions from which normal children should be protected. Even when there are no noticeable physical peculiarities, the proper instruction of the large groups of children usually assigned to one teacher is possible only when the whole group is approximately of the same degree of mental alertness. The fundamental basis of school administration as it now exists is the proper gradation of pupils and this is impossible so long as the exceptional children must be instructed in the same classes with the others. It is unfortunate that limited finances or scarcity of rooms should render it necessary that the highest degree of efficiency should be prevented by the presence in any room of a few pupils who cannot profit from the instruction suited to the majority.

In Boston extensive provision is already made for exceptional children, as outlined below:

A. The Horace Mann School for the Deaf. Excellent provision is made for deaf children in the Horace Mann School. This school also admits pupils from outside of Boston for whom the state pays the tuition. Provision for blind and crippled children is made in excellent private schools not connected with the public-school system. A Parental School is maintained by the city, but it is not in charge of the School Committee.

B. Special Classes for Defective Children. Several special classes have been maintained and more should be established as soon as suitably trained teachers can be secured. A special medical expert examines the children who are recommended by the principals for admission to these classes. Only improvable cases are accepted. Children too defective to profit from the type of instruction presented in the public school are taken care of privately or by the state institution established for that purpose.

Especially trained teachers are employed in these classes and the number of pupils is limited in each class to fifteen. The course of study is exceedingly flexible and is especially full of motor-training elements. Many pupils

have been returned to the regular grades. Many others, who have made small progress in the acquiring of knowledge, have, however, established moral habits and acquired physical control sufficient to make them eventually safe, self-supporting members of the community.

C. *Disciplinary Classes.* Two such classes have been established under charge of teachers especially qualified for this work. Not to exceed twenty pupils are assigned to each teacher. Only pupils whose records are such as to justify sending them to the parental school are assigned to the disciplinary classes. These classes, and the juvenile court, have caused a very marked reduction in the number of pupils committed to the parental school. The success of the disciplinary classes has been very marked. With scarcely an exception pupils whose school work and behavior, under ordinary conditions, has been valueless to themselves and detrimental to their classmates have become, in the disciplinary classes, interested in their work and therefore obedient and punctual. The success is based upon the sympathetic personal attention of the teacher to each pupil under conditions that differ from those of ordinary school almost wholly in the reduction of the number of pupils assigned to the class. These classes serve to demonstrate how much better the schools could be made if it were possible to have fewer pupils per teacher.

D. *Ungraded Classes.* In each district at least one ungraded class is authorized. In some districts where a large number of immigrant children are learning to speak English several such classes are conducted. These classes differ from regular classes primarily only in the fact that a smaller number of pupils is assigned to them (thirty-five). The instruction necessarily must be adapted to the conditions in the class and the course of study is modified to suit these conditions. The purpose is to give special help to those pupils who need it and to return them as soon as possible to the regular grades.

E. *Summer High School.* In the summer high school opportunity is given to secure additional points or to supplement the work of the regular school sufficiently to enable the pupil to secure a passing mark. By this means pupils of exceptional ability may be able to shorten their high-school course by a year, and pupils who have failed to pass some part of their work during the year may make it up in the summer with the result that they will graduate in four years instead of five. From the point of view of economy, the summer high school will undoubtedly reduce the total school expense by enabling many pupils to finish a high-school course a year sooner than they otherwise would.

F. *Children in Ill Health.* Ill health is undoubtedly the chief cause of retardation. The amount of instruction that is wasted because it falls upon deaf ears or is spread before blind eyes or is presented to children of impaired vitality is too great to estimate. By far the larger share of those pupils found in the classes previously discussed are there primarily because of some impair-

ment of health. The great task for the schools should be not to establish special classes for those physically defective, but rather to prevent and correct these physical defects and enable the children to remain in the regular grades. To this task Boston is giving a great deal of attention. Eighty school physicians, under the board of health, make daily investigations of all cases of contagious disease. Thirty-four school nurses are constantly employed in finding and correcting all forms of physical defects. The entire department of school hygiene is giving its attention to improving the health of the children. Every pupil is examined each year by the teachers for defects of eyesight and hearing. As a result of all these agencies thousands of children, who would otherwise have been unable to profit by the instruction offered, have had defects interfering with their education corrected or removed and are easily doing the regular required work of the schools. All of these efforts have increased the total cost of education, but to a far greater extent have they increased the total product of the schools.

G. Outdoor Classes. A special problem directly connected with the general problem of the health of school children has been the outdoor class. In January, 1909, the Park Commission granted to the School Committee the use of two rooms and the roof of the refectory building in Franklin Park, and an outdoor class was opened there on January 18, 1909. The October previous the School Committee had at the request of the Society for the Prevention and Control of Tuberculosis furnished a teacher for the children attending a camp conducted on Parker Hill by that society. The children attending this camp were transferred to the new school and the Society for the Prevention and Control of Tuberculosis continued to conduct the medical inspection and to furnish proper nourishment at a nominal charge paid by the children.

No pupil who has reached a contagious condition is admitted. In fact, it is probable that owing to the instruction in the open air and the careful medical examination, there is less danger of contagion in these classes than there is in the regular classes. A careful medical examination of each child is made by an expert every second week. The children who have attended have shown marked and rapid improvement in health and a very large percentage of them were returned to the regular classes as cured.

The question of a permanent arrangement for the management of children of tubercular tendencies is manifestly one of the most important ones needing immediate solution. The serious economic waste that may be prevented by saving the lives of these children is so great that the expenditure of all the money needed is justified. Evidently the problem is one in which the co-operation of the School Committee, with some agency of the city directly charged with the care of health, is necessary, whereby medical inspection, including suitable food when needed, may be supplied outside the School Committee funds, leaving to the School Committee the task of supplying suitable instruction. Such an arrangement is now under discussion by the Board of Trustees

of the Consumptive Hospital and the School Committee. The City Council has approved the expenditure of a portion of the funds devoted to the use of the Board of Trustees of the Consumptive Hospital for the purpose indicated above.

H. Fresh-Air Rooms. Quite apart from those children who are properly hospital cases and those children who are suitable candidates for outdoor classes, the schools should do something for many hundreds of anaemic and sickly children for whom the conditions in overcrowded, and especially in overheated, schoolrooms are unfavorable. The Schoolhouse Commission has been requested to provide each new building with fresh-air rooms, so arranged that the heat may be shut off and the room filled with fresh outside air and flooded with sunlight. In these rooms pupils who would benefit from more fresh air may be seated with slight additional administrative difficulty and with no additional cost.

In this connection also it should be emphasized that teachers as a rule enjoy a higher temperature than is good for the children, and undoubtedly many rooms are kept overheated to the very great injury of both health and education of the children. Fewer colds and other illnesses, better discipline, and better work will result from a uniform temperature below seventy degrees than from one above.

To wait until fresh-air rooms in new buildings are supplied in every district would be to postpone the benefits of fresh-air instruction for some generations. Much can, however, be done under the present conditions. The possibilities in any school are illustrated by an experiment conducted during the present year by the principal of the Prescott School.

With the advice and assistance of the school physician and nurse, about twenty children, who were thin, pale, anaemic, and repeatedly absent, were seated during pleasant weather in a cozy corner of the school yard, with portable desks, and under the charge of a special assistant. The regular work of the classroom was carried on in this outdoor class. This arrangement relieved the most crowded rooms, and worked a most phenomenal change in the condition of the children who are in this fresh-air class. The average gain in weight in a month was over three pounds for the whole class—some showing a gain of ten and eleven pounds. The regular teachers of these children have remarked, with much surprise, upon the sudden appearance of unsuspected mental alertness, interest, and voluntary effort.

Such an arrangement can be readily made in any school. Its success is materially increased if each child is furnished at recess with a glass of hot malted milk. Suitable arrangements have been made in the Franklin School whereby this nourishment is furnished at a nominal charge of ten cents per week, paid by the children.

VI. THE NEXT STEP IN THE INVESTIGATION

LUTHER H. GULICK, RUSSELL SAGE FOUNDATION, NEW YORK, N. Y.

[*An Abstract*]

The term "exceptional children" puts into a single category many kinds of children. That is, it is a classification by difference. Children are classified in this way because they differ from the normal.

The specific phase of the subject which is of interest to us is this: To what extent and in what ways is it the function of the public-school system, as such, to discover and provide for the education of exceptional children.

There does not appear to be any great difference of opinion as to the necessity for the discovery of these children—the blind, the deaf, the tubercular, the verminous, the moral perverts, the semi-truants, the feeble-minded, etc.—because they form a great drag upon and a menace to the progress of the regular work. The accomplishment of this result involves, first of all, skilled medical inspection in co-operation with the observation of teacher and principal.

There is also an increasing experience tending to show that, inasmuch as these children when adults should, and largely will, live among normal people, it is an advantage to have their education as far as possible conducted among normal children. Exceptions must be made of course in the cases of those who are so perverted or defective mentally or morally that it will always be a danger to the state to have them at large.

To bring about the desired action by the public schools it is necessary to educate public opinion. Thus we must have public meetings in our several communities, and see that they are adequately reported in the press; secure the co-operation of the medical associations, the bar associations, the charity organizations, the women's clubs, and all organizations interested in civic welfare. An active, persistent campaign of this kind in which the real conditions and needs are set forth will result in such appropriations and ordinances as will permit the work to be done.

The very term exceptional implies that the exceptional child needs exceptional treatment: first, for the sake of the rest of the children; second, for his own sake; third, for the sake of the community; and that it is the function of the public school in large measure to provide such education.

DISCUSSION

I. C. MCNEILL, superintendent of schools, Memphis, Tenn.—In discussing the excellent paper which has been presented by Miss Jones, it is perhaps worth while to recall the fact that delinquency is frequently an induced condition. Parents and teachers often make delinquents of children by failing to observe the fundamental things and processes incident to growth and development. They make children hate books by forcing them to read before an interest in reading is aroused. By rushing them into arithmetical or grammatical analysis before their development warrants it, they are made to dislike the subjects.

Permanent aversion to school is the legitimate result of putting children at work on studies they are not mature enough to apprehend. The method of presentation, however, often counts for as much as maturity. Some teaching is so unscientific and consequently so spiritless that it would make most any child delinquent. "The attempt to put high-school branches into grammar grades or intermediate studies into primary grades gives the result that Dr. Blimber found in the training of Toots, who, 'when he had whiskers, left off having brains.'"

The best students of delinquents, so far as I have been able to get in touch with them, say that in the solution of the treatment of exceptional children there is need of the co-operation of medical and educational science. Most states have institutions for feeble-minded children. These institutions are conducted by people who are trained scientifically for the duties they assume. It happens, however, that for minor cases, such as suffer from slight physical defections, or for those who vary from the human type only to a small extent, the burden of caring for them is put upon the public-school teacher, who has had little opportunity to build a philosophy of education which will cause the children of the low classes of mentality and morality to move upward into higher classes. Too often we find that delinquent children drag down the ordinary schools without receiving the expert individual attention which they so imperatively need.

The writer of the paper justly insists that instruction is not the primary element in the education of abnormal children. Educative agencies must look continuously to the care of the physical and the emotional, as well as to the intellectual side of education. I quite agree that consistent regimen in mental exercises, in habits of life, in acts, sleep, etc., are all to be considered in the treatment of exceptional children.

"Society suffers from elements which are unstable, erratic, shiftless, and inefficient. These elements corrupt morals, lead to irrational modes of living, and swell the hosts of the helpless and criminal who become the real burdens of society. Unless the delinquent classes have the benefits of the kind of education which is adapted to their peculiar needs they grow up among us and recruit the army of people who never fit anywhere. They fill the poorhouses, the prisons, the asylums, and the slums." They produce and reproduce their kind and bring about a feeling of social unrest, which is growing in this complex age.

Mr. Morrison, who made a splendid study of juvenile offenders in England, has contributed items of great value for all who are interested in bettering social conditions. He found in his investigation of hundreds of cases of children and youth that had to be put into reform schools or houses of detention or correction that in a large majority of instances the parentage was extremely unfortunate. He found that the children of unhealthy parentage, the offspring of those who were not normal in their bodily structure, are liable to inherit defective physical organization and have some corresponding mental twist which will be revealed in excessive selfishness or in a lack of mental foresight. He found, too, that the offspring of criminals are liable to become criminal because a large percentage of criminals are biologically imperfect animals, and because the atmosphere of the criminal home or community has a tremendous downpull. He also came to see most clearly that it is extremely unfortunate for the child to have a weak-willed father or mother, or both. A failure on the part of the home to exercise even and forceful discipline is a moral sin which has put the curse of Cain and the stamp of Satan upon many a promising boy or girl. The tremendous force of this study is worthy our most careful consideration. When we realize that the child of the wanton woman and the brutal, but healthy, father has a much better chance in life than has the child of the saintly, but feeble, mother, and the puny, but righteous, father we see the necessity of proper stress being put upon the physical end of education. When we realize that criminal parentage on either side puts a taint upon the character of the infant thru the unseen and subtle influences that come from the suggestions in the environment of criminal homes, we face one of the great problems of humanity. Again, when we realize the baneful working of uneven discipline, growing out of weak-willed, inefficient parental government, we stand in the presence of another great problem. How

can we impress fathers and mothers and teachers with the idea that weak and vacillating government of children blasts their lives and makes them candidates for the ranks of the ignoble?

*REPORT OF THE COMMITTEE ON MORAL TRAINING IN
THE PUBLIC SCHOOLS: A REPORT OF PROGRESS*

THE HOME AND SCHOOL LIFE

JAMES M. GREENWOOD, SUPERINTENDENT OF SCHOOLS, KANSAS CITY, MO.,
CHAIRMAN

[*An Abstract*]

Each exact science is based upon certain elementary principles, to wit, the mathematical, physical, biological, and other sciences, and it is thru the mastery of a few definite fundamental truths that the learner comes to a clear and unquestioning recognition of the abstract principles constituting any science; in the moral sphere the child at first has no intuitions of the abstract principles of right and wrong, but as he grows in knowledge, the time is reached that when he witnesses an act he feels it to be right or wrong, and he further decides that it is a good or bad act. It is from this norm, branching out in two different directions, that the child begins his crude generalizations on moral questions. As a result of this process of mental thinking and acting, a philosophy of conduct is established that becomes as valid to him in the moral sphere as are the fundamental principles of any other science to the student engaged in the pursuit of any particular department of learning. Thus a constant repetition of virtuous acts grows into habit, habit develops into character, character makes conduct, and conduct is the greatest part of active life in conformity to one's nature.

As a practical science, moral education, or ethics, relates to all kinds of deeds and habits of doing which concern one's self in relation to others, whether they be in small or large groups. It is a matter of the highest importance that a child at home should be trained into habits of right behavior in order to get control of himself before he enters school.

How shall morals be taught? There are many different ways of going at this subject which will produce satisfactory results. The first lesson, however, should be that of obedience, beginning with home training. Character is largely made or unmade in the home life and what issues from it. Enumerating habits that should be taught to children at home and in school.

Making children over—heredity and environment. The teacher must deal with human nature in its crude state and as it comes to school.

The school life and school habits still further emphasized. Why are children sent to school? What the community life in the school represents. How it is related to the higher life. Good teaching a moral force. Testing the moral judgments of children on practical experiments as they arise in school work—a most valuable exercise.

Moral training in school and how it can be done—illustrated and teaching by contrast.

A duty to work. Adherence to purpose and the choice of a special calling. All actions should have a moral basis for their background.

DISCUSSION

MISS ALMA L. BINZEL, principal of Normal Training School, Brigham Young University, Provo, Utah.—To ask and to answer questions about moral education is comparatively easy; the transformation of ideas into anything like general practice constitutes the great difficulty.

Since the time of Plato the three aspects of the moral phase of the educative process have been variously stated, but in essence they are similar, for his terms of "noble birth," "habituation," and "rationalization" mean respectively "influence of good environment," "formation of right habits of behavior," and "instruction concerning the moral basis of all action." In actual practice, difficulties set in at the very outset and continue to the end.

In how many homes today are the daily, hourly acts and attitudes of the parents fit models for the young to imitate? In how many homes is there the sympathetic but persistent holding of the children to carefully chosen lines of action until they are established as habits? In how many homes is there, when the occasion calls for it, clear and definite instruction as to the why of commendation or condemnation of motives and actions? Substituting the word "school" for "home" in the above questions might bring us somewhat different returns, but would they be much more satisfactory?

It is one thing to say that "children should form, in the home, the right habits of behavior;" it is quite another matter to set the influences at work to approximate that result more universally. It is one thing to suggest that the school must not only supplement the home training but often counteract it; it is another matter to produce the "satisfactory results" suggested by the previous speaker so long as ethics is neither a prescribed nor an elective subject in the majority of training courses of each succeeding year's crop of teachers.

Granted that "good teaching has a positive moral value;" that "many school subjects have a vital ethical content," and that, here and there, well-organized courses in ethics are already established while in still others intelligent experiments are being carried out—granted all this, is it not true that the school world is slower than it should be in taking hold of the matter? The conscious direction of the educative process is the business of the school, but in the matters of moral training procrastination seems to be its policy, for year after year there are turned out those who soon are to become teachers either in the home or the schoolroom without any special training for the work.

I believe that there is available, at the present time, a body of literature upon moral education that should come into the experience of young people so that they may become *more thoughtful* concerning matters of conduct.

With the younger children this work should be done thru the medium of oral presentation and thought-provoking discussions. At least two fairly definite lines of work should be carried on: one, the so-called incidental teaching growing out of the problems involved in the children's actual behavior and in the literary and historical subject-matter which constitutes part of the regular school course; the other the presentation of ideals of conduct, of ethical standards or principles which, thru discussion and illustration within the comprehension of the children, will sensitize, make thoughtful, and hence prepare for occasions which teachers, intelligent concerning growing child nature, know will be certain to arise.

This sometimes so-called "formal" instruction in morals meets, among those who have usually depended upon the incidental teaching, with opposition; among those who have experimented with it, with approval. Granted that the schools without it have been a force for moral uplift of people, there still remains the question whether they would not be more

effective with it. Why in this branch of human experience should we hesitate to look at children's possible near-future motives and acts? Confinement to that which has already happened is limiting in this, as in other subjects of vital interest to growing individuals.

That the incidental teaching alone is insufficient cannot be denied when we stop to recall how many home and school teachers of children possess hazy, indefinite ideas of the moral principles; who are not sensitive enough to distinguish between the conventionally and the truly good in practice. Take, for example, obedience. How many teachers and parents see the good of obedience to the child's self as a higher one than obedience to their commands and wishes? How many of them realize that in a seemingly great act of disobedience there is only that which is recognized as the highest and best that self can conceive? Luther's break with the church, or Elizabeth Barrett's refusal to yield to the whims of her father illustrates the point in question.

Again, how many teachers and parents have clearly in mind that the fine art of truth-speaking involves consideration by the speaker of his own intention regarding the conveying of an impression and the attitude of his listener?

It is just because these and other fundamental moral ideas are hazy and indefinite in many grown-ups today, that those of us who have experimented with both the so-called incidental and the formal lines of work feel that the one supplements the other, and that until we of the school-world take up this matter in greater earnestness and open-mindedness we must be open to the charge of ignoring our opportunities.

HENRY B. BROWN, president of Valparaiso University, Valparaiso, Ind.—One of the great problems which educators must solve is not whether morals shall be taught in our public schools—practically all concede this—but how shall they be taught? So closely are moral training and religious training connected that when we speak of teaching morals in the public schools we think of teaching religion in the public schools; and some who are ignorant of the real functions of religion take it to mean theology. The teaching of theology—not religion—was really what caused a suspension of moral, or religious, training in the public schools.

Not many years ago when the divisions in the various religious bodies were more marked than they are now, the particular doctrines—not religion—of a church were taught. This finally became so repulsive that for a time teachers were afraid to speak of religion or morals in connection with the schools lest in some way they might give offense. The difficulty was not in religious teaching, but in doctrinal teaching. Real moral training, or religious training, was forgotten in the fanatical zeal for the furtherance of some particular doctrine.

That the product of the public school, or college, or university, is not nor ever will be all it should be, yet that pupils do come out of the public school, college, or university with less of moral training each succeeding year, cannot be questioned. Fraternities, Greek-letter societies, Y. M. C. A.'s, and Y. W. C. A.'s have gotten too far from their original purpose and usefulness and are becoming mere social organizations. Formerly they were powerful factors for the good of the school with which they were connected. Now too many of them are originators of a factional spirit—"sowers of discord among the brethren."

The same spirit as is found in the colleges and universities prevails in the public schools, children being imitators. The result of the high-school fraternities or societies has been disorder to such an extent as to destroy government and thus destroy the usefulness of the schools. Many a president of a university or superintendent of a public school has spent sleepless nights trying to discover some remedy for this disorder, when he should have been giving his mind rest for the exacting duties that necessarily come to him daily.

I am not saying that the public schools are so corrupt, nor am I saying that secret societies should be abandoned, but I am saying that they should go back to their original principles and that for which they were established—the uplifting and upbuilding of charac-

ter among themselves and the schools. I am not a pessimist; I have great faith in the young people and their organizations, and I believe when the educators do their duty the younger generation will not be slow in becoming helpers and guardians of the peace and all that goes to the betterment of humanity.

The Y. M. C. A. is too rapidly becoming a rich-man's club. The unfortunate, the weak, those who need help, are not welcomed. Those who can already take care of themselves and who perhaps do not need the Association are the ones who are sought after and accepted, and given the "first seats" in the public places. In the early history of our popular games—football, baseball, tennis, etc.—fair play and honesty were requisites; and so long as these were dominant features the games were respected and those who engaged in them were considered the most fair and honorable among their fellows. They were chosen because of their honesty in their studies and it was not uncommon to hear the remark that the member of the football team had an average of higher credits than any others in the school. Gradually, however, these elements dropped out and now it is a question with many of our universities, colleges, and public schools whether these games shall be tolerated. I am not arguing against athletics, but am saying that if these games shall continue, those who engage in them must return to the original idea of fairness and honesty.

We are responsible for this low standard of morals. Whatever we may think about it we cannot evade the responsibility. We assume the positions as superintendents, presidents, and teachers and we must assume the attendant responsibility. If we are unwilling to do this we should step aside and give place to those who will do so. No one who seeks a position should complain if the duties connected with the position are exacting—he accepts them by accepting the place. The man who is elected to a position of trust and then complains because of the hard work is not worthy of the place.

Morals and religious training, while they may have different sources, are yet in a measure co-ordinate and must be taught in the public schools—"taught," I mean all the word implies. The teaching of morals must not only be permitted, but it must be required, and no course of study should be complete without having as one of its subjects the teaching of morals; and the course must be marked out and followed just the same as in other subjects. We are accountable for the future value of the children to society. We mold their characters, and whether these children grow up to men or women of beautiful or hateful characters depends upon us. We cannot shirk the responsibility. We are already, I believe, ready to assume this responsibility and it should not be deferred longer. This Association by its own actions has put itself on record as being ready to assume any responsibility that comes to it. Every day the children are getting farther and farther away from us. The movement is at hand and, like all other great movements, the people will take hold of it and, when they do, its purpose will be accomplished. The great convention at London formulated an outline for the progressive teaching of morals in the public schools. Scarcely has there been, during the past few years, an educational, religious, or any other great gathering where this question has not been prominent. The child must have moral principles instilled into his very nature and at the most receptive period if he would retain them. People are rapidly becoming educated in this matter and let us help them to see that what we want to teach in the public schools is not theology, but the principles of morals, or religion—sincerity, truth, honesty, unselfishness, charity, neighborliness, and hosts of other things which make for character and good citizenship.

I am not opposed to theology or Christianity. Christ said, "I am the truth," and again he said, "The truth shall make you free." In other words it shall cause us to stand against temptation. It shall place us all, morally and religiously, in the proper light before the God who rules all things and always gives safe direction.

JAMES M. GREEN, principal of the State Normal and Model Schools, Trenton, N. J.—
It is conceded by all that good character is the highest result of education, therefore any

modification of our educational system that will bring an increased result in good character is to be desired.

All discussions of morals, ethics, religion, and so forth, are confronted with the fact that there is no settled definition of what constitutes either of these qualities. Morality to one person does not mean the same thing that it does to another. Religion to one person does not mean the same thing that it means to another. The strong denominationalist often means by religion his own peculiar creed, and is willing to condemn anything that differs with his view as irreligious. I think, however, all will agree that the essence of morals or religion is a quality of mind, is really an attribute of mind, and expresses itself in an attitude toward subjects of whatever nature. It is a serious question whether or not we can lay out a graded series of lessons, the object of which is to produce an attitude of mind toward all problems.

If we are to teach the children that certain things are right and certain things are wrong we must first determine ourselves what things are right, and what are wrong. When we undertake to do this we find that the problem is difficult; for instance, as moral questions—Should the truth be spoken at all times? Should one person ever strike another? The answer to such questions as these depends upon motives, and depends upon them in such a way that it seems impossible to answer the question correctly or in a reliable way excepting as related to an incident. If a person, for instance, were about to step in front of an approaching car it would be quite right to strike him back, or if he were about to inflict an injury on an innocent person weaker than himself, it would be right to strike him unless an officer could be brought to arrest him.

I am acquainted with a number of men who have been concerned for some time with the question, What is religion? Is it a rule of life, or a form of worship? If it is a rule of life, how is it determined? Is it done by the Bible alone, or by following the light of the best we have, either thru divine teaching or the writings and teachings of men?

The old-fashioned conception of a school was that there were certain things that children needed to know, such as the art of measuring or number; the art of correct speaking; certain elementary rules or laws of social organization, as developed in what was termed history; certain rules of hygiene; certain social conventions, etc., and that these things could be learned best and most economically by gathering the children together in the school in a copartnership. When the children came together incidents of moral instruction would arise; for instance, one child would impose upon another by taking from him his book or slate. This would be the occasion for his correction—the incident of the moral lesson. The child would be corrected and perhaps told that he was wrong, but not given a theory of ethics. He was led to see that what he did if done by others would make all unhappy. Out of this incidental instruction was built up or collected the material that served later on as the basis for formal ethical teaching.

I confess I yet have the feeling that this is the truest way. It is quite likely that many people have been neglectful of exercising as much of the means of self-development on the part of the children, such as the formation of sanitary organizations, little self-government groups, and so forth, as they might, and yet even these formations would seem best as suggested by incidents rather than by prearranged plan.

In glancing over Dr. Greenwood's arrangement for grades, I am impressed with the language; for instance, for the second grade, where the children are presumably six years old, we find: "No. 4, *Truthfulness*. Meaning of truthfulness; ways persons can tell truth or falsehood; training; correct statements; measuring to find out truth; not guessing at answers to questions; teachers should make it easy for children to tell the truth." Please bear in mind that this is for children of the second grade, that is, six years old. Again; "*Helpfulness*. Erase blackboards; pass and collect materials; help janitor by folding seats; how children may be helpful at home and at school; how they may help to keep the city clean." "*Patriotism*. Flag salute."

These things do not sound to me like lessons for six-year-old children. They sound

to me like the composition of one who had set out to compose the things that should come into a moral life somewhere.

I am under the impression that the schools of the past have done more than any other institutions to build up the moral character of the country. I am of the opinion that the schools of the future can do more than the schools of the past have done. It seems to me that this greater work is to be done rather in finding more essential things to be taught than in a graded scheme of morals. For instance, science is bringing to light, thru the aid of investigation and study, social practices that need correction—practices on which the schools have been largely silent. Wherever evils of this nature are demonstrated to be of sufficient importance to receive the attention of the public, they should be brought into the curriculum at some place or in connection with some subject.

The schools have been almost silent on fundamental questions of economics—I mean, the elementary schools. This was but natural, as the knowledge of the elementary principles of economics was not at all common, but as learning is increasing it is coming to be the case that many teachers are sufficiently familiar with elementary economic problems to teach them—the problems, for instance, of the tenement district, or the spending of money for things that do not bring a productive return.

In the very nature of things, all matters of this kind must come into the curriculum at some appropriate place and in some appropriate way, but as pupils below the grade of the science of these subjects are so much dependent on incident for their understanding, I am very doubtful of the success of a formal graded series of lessons.

WILLIAM H. BARTHOLOMEW, principal of Girls' High School, Louisville, Ky.—Moral training cannot be dispensed with in the methods which are employed in the instruction and training of the youth. The lack of fair dealing in trade and the absence of moral motives in the performance of professional and social obligations indicate that the moral endowments of our youth must, from this time forth, receive such an impetus and strength as will change the present status of moral indifference and neglect.

The foundation upon which all moral training must rest is authority, and such authority must be free from errors of any kind. It must be inspired by infinite love, which operates according to the ability of the individual and for his betterment. The commands of such a Being are not dogmatic but they are natural and reasonable, and he who is exercised thereby finds the same to be superbly true. Obedience to all His commands is the beginning of moral training. Loyal respect to His commands at once establishes a universal standard which applies equally to the rich and poor, the high and low, and removes the many standards which men have set up.

This divine standard is subject to no variations but it is the same yesterday, today, and forever, for its Author is omniscient and omnipotent. Therefore, He directs men into the way which leads to those high moral standards of excellence which are approved by God and men. This doctrine should be faithfully taught, for without its acceptance character is weak and unreliable in the midst of temptations.

Dr. McCosh said, in treating the conscience—"the moral faculty in man"—that it is not infallible, but that it looks up for light, and it sees that there is such a light. Hence, it follows that all moral training which excludes divine wisdom will have a sandy foundation and its dissemination will sow the seeds of disintegration in the hearts of men which cause their moral ruin.

My exhortation is the recognition of the necessity of taking God into our confidence in our efforts to train the wills of our children so that they may grow into stalwart, moral men, reverencing God and loving their fellow-men. We should lay hold of every opportunity to emphasize by example the beautiful and useful principles of right thinking and right living, or in other words follow the Golden Rule.

The survival of the unfittest should be our slogan, that is, the training of the unfittest to that high and honorable degree of citizenship by which they will love to exercise with

conscientious fidelity its duties and responsibilities. "Not by might nor by power but by my word," saith the Lord.

As to the direful results which will follow our failure to impress the doctrine of moral training, I am reminded of the story of the snake-charmer who possessed a boa-constrictor which for some time he controlled; but upon a certain occasion before a large audience the boa became unmanageable and wound itself around the body of the charmer and crushed him to death. So it will be with our beloved country. If we do not control the vicious tendencies of our boys, they will be crushed to death by their relentless fury.

God forgive us, lest we forget!

*REPORT OF PROGRESS BY THE COMMITTEE ON THE
CULTURE ELEMENT AND ECONOMY OF
TIME IN EDUCATION*

JAMES H. BAKER, PRESIDENT OF THE UNIVERSITY OF COLORADO
BOULDER, COLO.

Last year a preliminary report was made on "The Need of an Investigation of the Culture Element and Economy of Time in Education" with the conclusion that, judging from the facts and opinions gathered, such an investigation would be warranted; and the Council adopted the recommendation and increased the committee to five members. The committee is as follows:

JAMES H. BAKER, president of the University of Colorado, *Chairman*.

JAMES H. VAN SICKLE, superintendent of Baltimore schools.

WILLIAM H. SMILEY, principal of Denver High School, East Side.

HENRY SUZZALLO, professor of the Philosophy of Education, Teachers College, Columbia University.

ALBION W. SMALL, professor of sociology, the University of Chicago.

Last year by error the subject was printed on the program, "The Culture Element in Education;" this year it reads "The Culture Element and Economy of Time in Education;" next year it will probably read "Economy of Time in Education;" and the next year (for it will probably require two or three years to complete this report) it may read "The Reorganization of American Education."

The printing of the material for the use of the committee, which was gathered last year, was delayed for various causes and has been available not more than two or three months, hence we can only report progress. The work of the committee is divided as follows: Superintendent Van Sickle makes a preliminary investigation of the problem as related to elementary education; Principal Smiley takes secondary education; President Baker, the college as related to elementary and secondary education, and to the other departments of the university; Professor Suzzallo, the view of the "philosophy of education;" Professor Small, the sociological view, relating the whole subject to the just demands of our civilization today. Each member of the committee places the printed material in the hands of a number of coworkers selected by himself and invites their co-operation in furnishing facts, experience, and opinions. After the report from each member is in the hands of the chairman, a report

of the committee as a whole will be formulated for discussion and final conclusions.

I may as well state frankly the thesis which is in mind (you will recall that you humorously offered a price to learn what was in my mind on this subject). It is this: That in the entire period of general education two years can be saved, without loss of anything essential in culture, efficiency, or character-making—this thesis to be proved or disproved. The majority of the opinions received last year expressed such views as these: "Sweep away all rubbish;" "abolish mechanical methods;" "do not try to teach everything that is good;" "make a distinction between first-rate subjects and facts and tenth-rate;" "do not teach all subjects, disciplinary and inspirational, alike." May I repeat here the summary in last year's report on waste and methods of saving time in elementary education, since we cannot impress these views, the subject of our investigation, too often:

Time is wasted by—

- "Lack of medical inspection of school children."
- "Unmotivated and ineffective reading, writing, arithmetic, and geography."
- "Covering unimportant and unpractical topics."
- "Needless multiplication of the subjects taught."
- "Hopelessly expending energies upon non-essentials."
- "Scattering of pupil resources."
- "Routine practice, odds and ends, 'fads and frills' generally."
- "Lack of great, strong, enthusiastic, educated teachers."
- "Lack of enlightenment regarding the ideals at which education aims."

Time can be shortened by—

- "More careful pruning of the elementary program of study."
- "Making distinction between first-rate facts and principles and tenth-rate."
- "Casting out worthless rubbish."
- "Not trying to teach everything that is good."
- "Sticking to the elements of the subject."
- "Pruning and vitalizing subject-matter."
- "Confining period of elementary education to mastering the tools of education."
- "Not overemphasizing military and political details in history."
- "Putting less time on formal reviews."
- "Not teaching content studies with the method suitable to the formal subjects."
- "Fitting the course of study to the individual."
- "Following social and concrete interests."
- "Using industrial or manual training to vitalize academic instruction."
- "Teaching children relations of what they are doing to ends that they desire to reach."
- "Separating the brighter pupils destined to a profession and securing concentration and continuous progress."
- "Introducing secondary-school work in the higher grades."
- "Beginning the study of foreign languages, elementary algebra, constructive geometry, and elementary science, thus saving one or two years of the high school."

On the question of teaching all subjects by the same method in the high school may I quote from the resolutions of the High-School Conference held at the University of Colorado last spring. The points are very pertinent to our inquiry:

WHEREAS, The various studies of the high-school curriculum differ in respect to the purpose for which they are taught and to their functions, and

WHEREAS, The usual practice in high schools now is to teach all subjects without any differentiation in method with respect to function and purpose, be it

Resolved, That it is the sense of this body that such a differentiation in method should be made; that certain studies should be taught intensively to the end of producing definite powers and abilities; and that content subjects should not be taught with the methods suitable to formal subjects, but should be taught to the end of inspiration, producing equivalent results with a smaller expenditure of time and energy; and that this may be done, be it further

Resolved, That it is the sense of this body that the present unit system, with its insistence upon mathematical measurement of inspirational result, and its tendency toward mechanization of method, is unsatisfactory, and that some modification is desirable.

Superintendent Van Sickle and Principal Smiley will make reports of progress at this session. I will close by referring to the line of inquiry I am pursuing for the college. Since we need to keep clearly in mind the subject of the inquiry, I will quote from last year's report the scheme advocated by one-half to two-thirds of the correspondents replying to our questionnaire. This scheme is as follows:

1. To end college work with the sophomore year but allow four years as now for the A.B. degree.
2. To let university work—work that gives scientific power—begin at the junior year with groups leading to the various professional degrees or the Ph.D. degree, the last two years of college counting toward those degrees.
3. To require two years of college for admission to all professional schools.
4. To complete the professional work or Ph.D. work in two years more or six years after college entrance.
5. To let the college do the first two years of the professional work instead of allowing the professional school, as now in many cases, to do the last two years of college work.
6. To consider the possibility of advantageously building the engineering school upon the first two years of college.

It must be remembered that since the early New England college we have added nearly eight years to our period of general and special education, that eight years are given to high school and college with much repetition of subject and method, and that these facts, with others, call for a re-examination of our whole plan of American education. In the University of Colorado the faculty have spent two years in reorganizing the College of Arts' courses and, while there are no new elements, perhaps the scheme of organization is somewhat different from any found elsewhere. We regard unlimited election as a demonstrated failure. The first two years of college, while giving the student a choice between classics, mathematics, and various sciences, require certain subjects, such as English, literature, history, economics, psychology. In the last two years the student must elect some group that will give a more definite knowledge of something—to the end of efficiency, and strong character, without loss of culture—rather a deepening of culture by better methods. These groups include in the last two years the following:

- I. Division of Letters: 6 groups.
- II. Division of Sciences: 7 groups.

III. Division of Philosophy: 3 groups.

IV. Division of History and Economics: 2 groups.

With the same general purpose in view, but elaborately carried out, the College of Commerce and the College of Education have been established.

V. Division of Commerce, organized as the College of Commerce: 4 groups as follows: (1) Banking; (2) Manufacturing; (3) Journalism; (4) Trade, Transportation, Consular Service.

VI. Division of Education, organized as the College of Education: a professional group, and groups corresponding to those of the College of Liberal Arts.

Here may also be noted the arrangement for obtaining two degrees in six years by crediting courses in the professional schools as a substitute for the groups and electives of the last two years—an extension of the group system.

VII. Engineering Subjects: equivalent of two years.

VIII. Law Subjects: equivalent of one year.

IX. Medical Subjects: equivalent of two years.

To show the trend of thought in this country, and as a contribution to our investigation, I quote from the report of the committee of the National Association of State Universities on "Standardizing," the report being unanimously adopted:

Present tendencies point, in our opinion, then, to a definite differentiation in the work of the college at the close of the sophomore year toward university work in the real sense. If these views are just, we suggest the following formulation of principles underlying the organization of such an institution, and we may define the standard American university to be an institution—

Which offers in the College of Liberal Arts and Sciences two years of general or liberal work completing or supplementing the work of the high school;

Which offers a further course of two years so arranged that the student may begin work of university character leading to the Bachelor's degree at the end, and reaching forward to the continuation of this work in the graduate school or the professional school.

In recommending that university work begin with the junior year of the college and that the professional schools be based on the first two years of college, the report is in line with present tendencies. It is in accord with the growing belief that the work of the last two years of college should be organized into groups that aim at more definite results, and lead to greater efficiency. But this is only the first of many problems. We are facing questions of the time beyond the junior year for attaining the Ph.D degree, of adjusting the scheme of counting the last two years toward both arts and professional degrees, of the place of the A.B. degree, of the age when the period of general education should end, and of a possible reorganization of elementary and secondary education. But these questions are not ready for solution and hardly belong to the work of the committee at the present time.

Now may I prophesy regarding the next step in the revision of the period of general education? When the elementary schools, and the high school, and the first two years of the college, by economy of time, material, and method, can accomplish as much or more up to the junior year than is now accomplished up to the end of the senior year, the last two years of college will be made to count toward graduate and professional degrees and two years in the whole period of general education will be saved; and all professional courses will be built on the first two years of the college. I cannot, of course, predict that the committee will finally reach this conclusion in their report, for this is a vital part of their inquiry.

*THE NEED OF AN INVESTIGATION OF THE CULTURE
ELEMENT AND ECONOMY OF TIME IN EDUCATION
AS RELATED TO SECONDARY SCHOOLS*

WILLIAM H. SMILEY, PRINCIPAL OF EAST SIDE HIGH SCHOOL,
DENVER, COLO.

The response to my request for a critical examination of the material gathered by President Baker for his preliminary report in 1908 has been most cordial and generous. Again, no uncertain note is sounded as to the timeliness of such inquiry, as to the necessity of a new definition of culture, as to the waste and retardation that affects educational progress at different stages, and as to existing causes for the same. During the year, the chorus of dissatisfaction with the results of our educational system from the lay-world, as well as from members of our own profession, has grown louder and louder. The Department of Superintendence, at its meeting in February last, showed its respect for the weight of such criticism by devoting the larger part of its time to the discussion of "The Elimination of Waste in School Work;" "The Relation of the High School to the Community and the College;" "The Articulation of the Higher Institutions with Secondary Schools," and "Vocation Training in Its Relation to Industrial Education"—all topics of vital importance to this investigation.

Within the last few weeks we have heard A. Lawrence Lowell, the new president of Harvard, declaring

No member of a faculty is satisfied with the respect in which scholarship is held by the great body of college students today;

and Woodrow Wilson asserting

There has been a growing disposition to look upon a university as a finishing-off school for young men, a sort of varnishing room, where a young man may be coated, more or less thinly, with a veneer and polish, and hung up to dry and be admired and looked up to by his fellows as one who merely has been thru college;

and further:

The University, so far as the faculty is concerned, does not control in any vital educational way the measure of student thought that it must control in order to fulfill its purpose.

It augurs well for the future that the whole educational world is sitting up and taking notice of such outspoken frankness with no trace of smug satisfaction, but facing with serious concern its tremendous task of shaping educational institutions to the complex need of this vast democracy.

Personally, I have been convinced for years that, even under most favorable conditions in both school and college, the deadly inertia of the indifferent or the weak, from lowest grade to highest, has been paralyzing to scholarly standards both in the teaching body and in the student body. Consequently, I view with satisfaction the turning of the tide of sentiment toward the problem of discovering and saving the scholar, and of finding and providing for others educational paths that lead to efficient activities. I venture to predict that

vocational training is bound to be the educational sieve that will give just opportunity to all classes of students, and bring them earlier to self-responsible, efficient use of such capacity as by inheritance they may possess.

There is a consensus of opinion that time can be saved both in the elementary and in the high school. Superintendent Kennedy, speaking of the elementary school—but his words in my experience apply just as truly to the high school—says:

The elementary course might be shortened from one to two years, not so much by cutting the curriculum as by getting work done.

Several emphasize the fact that the children of the elementary school should secure the habits that are the tools of education, and that the complaint of lack of accuracy and power of concentration is probably just. If this be true, it means, as we all know, slow, laborious, inefficient work in later years.

At the period of adolescence nearly all that the schools have given the child is sloughed off, except habits; they remain to help or hinder as the case may be.

So says Principal Armstrong of the Englewood High School of Chicago, and he suggests a division of the educational period into four typical schools, with which suggestion others, who believe in an earlier beginning of the secondary-school period for the sake of securing a more economic use of time, substantially agree. His division of the earlier years would be as follows:

1. The play-type or kindergarten (5 to 7 years old).
2. The motor-type or elementary school (7 to 12 years old), where habits are to be taught.
3. Intermediate-type (12 to 14 years old).
4. Secondary-school type (14 to 18 years old).

Perhaps Principal Armstrong's wisest suggestion, the outcome of his experience, is that regarding this intermediate type of school:

Children at twelve to fourteen should be isolated from the younger and from the more mature pupils, in order to accord them proper environment for their peculiar condition. I believe this can be done in all our city schools by creating an intermediate school that would include the eighth grade and the first year of high school. I would not have them taught in separate buildings remote from the other sex, for then the social influence would be lost. The result, so far, is the general feeling of all concerned that pupils and teachers understand each other better than before. One-fourth more boys return to school than formerly, and the scholarship of the boy is greatly improved.

The domination of college-entrance requirements as hampering the efforts of the strongest teachers by forcing them to keep everlastingly before students, as a standard, a quantitative covering of ground, regardless of quality of performance, is frequently referred to. President Atkinson, of the Brooklyn Polytechnic, declares that a man should start on his professional course by the time he is twenty; at least, he should be no older than twenty-one. He says:

I used to think that our secondary-school instruction was becoming more real, more individual, less mechanical. The great increase in college requirements the past few years has, however, prevented real reform. The secondary school needs a freer hand if it is to do efficient work of real culture value, which will develop responsible character.

The colleges ask for trained and efficient power in the students we send them. There are very few high-school principals who do not believe that we would send forth a better product if we felt freer to lay our own emphasis upon topic and method of work, unfettered by the formal, quantitative minuteness of the present specification of units. I sincerely believe that the teacher should have an absolutely free hand in the use of, at least, a third of the prescribed time; but under present conditions of quality of student, and quantity of prescription, the ground in most subjects cannot be covered by the average pupil, except in a most superficial and unsatisfactory way.

The weight of argument in my correspondence is overwhelmingly against the vocational or technical training of secondary-school students in separate schools, for fear of circumscribing opportunity in even the slightest degree, of forming classes, and thereby abandoning true democracy. Dr. William S. Sutton, of the University of Texas, declares

Should the Council help to settle sanely the problem of the place and function of vocational studies, various plans for peasantizing the common schools would no longer find influential advocates and more than one educational leader would be induced to revise his theory and change his practice.

The source, however, from which came a communication that seemed to me to have the broadest, fullest, and freest conception of the possible unity of our national education, was the University of California. May I, therefore, be pardoned, if I seem to slight the valuable contributions of many others, by extended quotation from Dr. Lange's striking sketch of the Californian situation:

The question is no longer, Shall the high school live unto itself? but, How shall it live with its neighbors on either side? Of what sort must the interschool railway be that all may travel for their health, some to the end, others to intermediate terminals, always with stopover privileges? Education must become more continuous, not mechanically but organically. The sixteen or more grades of our school system must come to stand approximately for as many adaptations to unbroken growth. The educational edifice erected by the nineteenth century still resembles too closely an irregular pyramid of three boxes, the tops and bottoms of which are perforated in order that the more acrobatic pupils may vault from the known into the unknown, and their teachers above and below may exchange maledictions. The twentieth century cannot accept this arrangement as final. The structure as seen from the outside may well remain intact; but the provisional tops and bottoms inside must be refitted, if not removed. Now, one essential in preparing for this task is to realize that adolescence begins at least two years earlier and ends about two years later than the inherited accidental high-school period. Divested of artificial meanings, secondary education is seen to cover not less than eight grades instead of four. Another essential is, of course, to act on this insight. A high-school section is a physiological anachronism until its circumference is extended to include teachers of the upper grammar and of the first two college grades.

The very heart of liberal culture, from the viewpoint of democracy, demands nowadays a trinity of developed senses—a vivid historic sense, the scientific evolutionary sense, and a practical economic sense. It implies that neither those who can and will prolong their school careers, nor those who must cut them short, should be deprived of the chance to get and keep in active, intelligent, sympathetic touch with the work and the workers of our

farms, our industries, our commerce. Accordingly, no high school is fully adequate in its cultural purposes until it has a department of agriculture, or of commerce, or of the mechanical and domestic arts, a department accessible not only to the incurables but to every student, a department in charge of teachers every whit as broadly and thoroly trained and as civilized as those of other departments—ought to be. Sweetness and light in overalls is a perfectly feasible and very effective combination. That society commits suicide which does not furnish the means whereby the boys and girls, who for any reason cannot go far beyond the grammar grades, may become trained, self-supporting, self-respecting workers.

In the interest, however, of both the individual and of the common weal, our educational expansion must be guided by three principles: First, no technical school must be so narrow in aim and scope as to cheat the pupil out of his heritage of race culture as embodied in language and the institutional achievements of his people. Second, no cultural high school must be allowed to become so narrow in aim and scope as to deprive its pupils of the opportunity of acquiring the economic sense and of finding themselves and their fellow-men by many-sided doing, related directly at some point or other to the business, or the agriculture, or the industries of the nation. Third, other things being equal, the surest guarantee of living together in the bonds of peace and of advancing together on the road of national destiny is the coeducation of all sorts and conditions of young people, and the longer they can be kept together the better for them and the general welfare when their turn comes to constitute the people, the state.

In closing, I would add that, just as the university is now organizing groups of subjects with a central core that leads with definite aim to vital concrete end, so should high-school administration seek to vitalize the purposes of its students around diverse interests that quicken ambition, and invite that kind of initiative which we teachers know to be the best and surest way of opening student eyes to the foundation value of some forms of abstract knowledge which in their blindness, at times, they so desperately shun. We need have no fear of the loss of culture when high schools shall be thus organized and thus administered.

THE MEANING OF INDUSTRIAL EDUCATION TO THE ELEMENTARY SCHOOLS

AUGUSTUS S. DOWNING, FIRST ASSISTANT COMMISSIONER OF EDUCATION,
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The widespread discussion of industrial and vocational education, at public expense and under public control, justifies us in assuming that the traditional course of study for liberal education in the elementary school is to be seriously affected. Leaders in education have persistently combated any tendency to regard the primary function of the elementary school to be that of directly fitting the child to earn his livelihood. They argue that it is at the best difficult to get for large numbers of people even the beginnings of cultural education, and they are determined to see a conflict between the purpose of the old and long-established program of studies and that of the proposed program. President Butler to my mind cleared the air and concisely stated this phase of the question when he said, "It will be a grave error to set vocational training and liberal training in sharp antagonism to each other. The purpose of the former

is to pave the way to some appreciation of the latter, and provide an economic base for it to rest upon. The equally grave error of the past has been to frame a school course on the hypothesis that every pupil was to go forward in the most deliberate and amplest fashion to the study of the products of the intellectual life, regardless of the basis of his own economic support."

The corollary to his statement is that industrial education must not crowd out, or narrow, the opportunities for liberal training, nor must the pursuit of liberal education hinder or disqualify the pupil for a practical, every-day, industrial vocation. Our problem is that of making the most effective adjustment possible between industrial training and liberal training. In the solution of the problem we are bound to recognize that there are several groups of children within the larger group or school, and that the aim of education is to give to each of these several groups the training which will render that group efficient as citizens, as producers, and as men and women of culture, within such measure as may be both possible and practicable. Our schools must move along the lines of educational democracy in the sense that they must provide equal educational opportunities for all; that they must consider the interests and needs of an army of pupils who must and will remain in the home or enter the industries at the end of the elementary-school course, as well as the interests and needs of those who can and will complete a part or all of the course in the secondary school before becoming wage-earners, and of whom many may and will go on thru the technical school or thru college before taking up their life's work. The curriculum of the elementary school now lays chief emphasis on the subjects of greatest cultural value. It leaves out of account the probable future of the pupil. Based on principles assumed to be democratic, it makes no distinction of mental capacity and proclivity, but offers and compels the same preparation to those who are to go into the commercial and artisan world as to those who will go into the professions. None of the studies, as presented, touches, in any direct way, the industrial environment of the pupil, nor do the subjects, except in certain parts of the work in arithmetic, concern themselves directly with problems which appear concrete and useful to the pupil whose bent of mind is vocational.

The large number of pupils leaving the elementary schools before completing the course may be found chiefly in two classes—those whose mental equipment renders it difficult for them to finish the work as at present arranged for the higher grades, and those whom stress of economic conditions at home or natural bent toward a vocation impels to go to work at the earliest possible moment. Unless the curriculum of the elementary school can be so readjusted as to provide definite vocational interest and meaning before these children reach the compulsory attendance age limit, they will leave the school without training or insight in any of the things which make for a wise choice or successful pursuit of any occupation.

The readjustment of the curriculum does not mean, as some have said, trade teaching in the elementary schools. Trade teaching to immature chil-

dren is out of the question; but it does mean preparatory vocational work for those whose interests must be met at this point in their school life in order to have them see the advantage to be gained by remaining in school. Kept in school thru interest in vocational training, they will unconsciously be receiving more of the liberal education which in itself failed to arouse their interest.

This preparatory vocational training will be established as a new and separate unit in the public-school system, to be carried out by those who have definite knowledge of vocational needs, with a specific interest in the form of instruction to be given. Such schools will be planned to perform a particular service, and in no case will vocational work be introduced under conditions which would merely be incidental to the general curriculum, tacked on and loosely articulated with the regular course of study. Vocational subjects will be the center and core of the teaching in these schools. Instruction will be so direct and valuable that its participants may count upon the knowledge acquired as an immediate asset in securing them a shortened apprenticeship in a shop or store, and a speedier advance in wages.

It is interesting to note that a few schools like the Manhattan Trade School, which started out to be exclusively vocational in character, developed supplementary work in the study of art, science, and economics, which is, for the type of student concerned, very effective as a means of liberal education. This correlation will never be possible in a system of education where the vocational training refuses to recognize any responsibility along lines of liberal training, and where liberal education refuses to recognize any responsibility for vocational training.

Entrance into these preparatory vocational schools will be open as elective in the school system in those cities where there has been marked defection in the sixth and seventh grades, and the courses will be offered to those pupils who might choose to follow its curriculum rather than that of the grades as at present arranged.

This plan for vocational preparatory training does not mean new buildings expensively equipped; it means simply the setting apart of one or more rooms in the present school building, or the renting or purchase of some unoccupied shop or factory, and then manning this school with sympathetic, qualified teachers, and equipping it with such tools and appliances as the best interests of the community shall require. In this school in small towns and in these schools in large towns, will be gathered the disaffected, restless boys and girls, impatient for something to do, and here they will work with their hands and study and learn to think on concrete applications of abstract principles which hitherto have not been understood to be related to anything but examinations for promotion to a higher grade where there was more study of more unapplied principles, and so on to the end of the course where others had arrived, helpless to do and hopeless of finding that to do of which they had even a slight, but accurate, knowledge.

In interpreting the meaning of industrial training to the elementary school, I assume that the compulsory attendance age shall be from seven to sixteen; that the first six years of the school life of the child shall be given unreservedly to the fundamentals of a general education as expressed in the rudiments of knowledge and of hand skill; that in the seventh and eighth years vocational training and liberal training shall be correlated; that between the two, after the sixth year of the course, there will be permitted a constantly varying amount of time and energy, as local conditions may warrant, but that the vocational studies shall be pursued side by side with studies which lead to a liberal education. With the most liberal allowance of time to vocational studies, even when predominance is given to some specialized form of industrial training, there would always be reserved to the pupil not less than one-third of the time for cultural studies to the end that his training shall not relegate him to a class, but shall keep him in sympathy with the general interests of society and of the state.

For boys, courses of study will naturally be framed with reference to those preparing for an industrial career, or for commercial life. In rural communities a third course might be arranged for those who would follow a career in agriculture. The courses of study for girls are of equal importance, but for limit of time I will consider only the course of study for those boys who will enter the industries.

Assuming that the course of study of the first six years has contained its fair proportion of manual work, the seventh and eighth years will lay added emphasis upon hand skill. With this handwork there will be offered related lessons in English, geography, history, physics, arithmetic, and drawing. The demands of industrial life and not a traditional school course will determine the nature of the shop work. Since in any occupation which these boys would follow eight hours of labor would be required, six hours of instruction each day is none too long a time for them in school—the program of study to be so arranged by alternating theory and practice as to avoid the work becoming fatiguing. All study will be under direction in the schoolroom, and recitations will be mainly for the purpose of instruction and training in method of study, and will not be for mere quizzing. Related subjects will be correlated and grouped under one main subject in order to unify the work to the highest degree.

The school day will be divided into longer periods in order to avoid the dissipation of attention and energy as now obtains in the elementary schools by many subjects and many periods. Applications will be taught before theory, and the pupil will learn only the essentials of subject-matter.

On the academic side the subjects, in the order of their importance, will be English, mathematics, science, history, and geography; on the practical side, drawing, shop-work, and laboratory practice. English will include the topics of literature, reading, composition, grammar, spelling, and penmanship. Mathematics will include arithmetic, algebra, and geometry. Science will

include elementary physics, with emphasis on mechanics and electricity, and elementary chemistry. History and geography will go hand in hand, with emphasis on the social and industrial development of the United States, United States history and civics, industrial history, and economics.

The meaning of industrial education to the elementary schools will reveal itself in the modification of the teaching of every subject. English and mathematics will serve to illustrate this.

The course in English will be such as to develop wholesome tastes for practical people, and will train to plain and forcible expression, both oral and written, of thought concerning the things that are of real interest. In literature, boys will read to learn, and to do this with understanding and with appreciation. They will learn to read and to discuss a book.

In mathematics, the source of problems will be the laboratory and the shop, supplemented by problems from outside industrial life. In arithmetic the pupil will be taught decimal equivalents of workshop fractions, approximate and check methods, ratio, proportion, percentages, four-figure logarithms, applied to multiplication and division, and various pocket-book formulae. In algebra he will learn symbols and fundamental processes, the substitution of numerical for literal values, and to interpret simple workshop formulae. In geometry he will learn measurement of areas of plane figures by reducing to equivalent triangles and rectangles, to use instruments in making simple constructions, and the geometry of simple solid figures.

These radical changes in teaching in schools equipped for industrial training will have a healthy reaction on the whole elementary-school system, from the lowest grade to the highest. There will be more attention to essentials, more concrete application of principles, an awakening of teachers to the capabilities of their pupils, and clearer insight into the possibilities of directing their lives aright. There will be a vitalization of all the elementary schools. Those pupils who are so fortunate as to possess the real desire for knowledge for the love of knowledge, and are able to satisfy this desire, which leads to what the world calls culture, will reap as rich benefits as do those who from choice or force of circumstances are denied the liberal education.

What industrial education means to the elementary schools may therefore be summed up as follows:

1. A more careful grouping of children with reference to their capabilities and proclivities.
2. A more sane and democratic arrangement of courses of study.
3. A new unit in the school system—namely, the vocational school.
4. A more cordial feeling of inter-responsibility between liberal training and industrial training.
5. A closer unification of all the work of the elementary course.
6. A longer school day with longer and fewer periods.
7. Better teaching of subjects by careful distinction between the essential and the nonessential.

8. An awakening and clearer insight of teachers into the possibilities of their work.

In a word, industrial education means to the elementary school its complete vitalization.

DISCUSSION

E. E. BALCOMB, State Agricultural and Mechanical College, Stillwater, Okla.—Industrial education will "bring out" the quiet, timid little girl who has had to stand at the foot of the class notwithstanding all of her patient effort. She has been too timid and frightened to express herself. She has ideas in her little head and she may excel in work with her fingers, because this work may be wrought out quietly without embarrassment. This will rescue her school life from a daily torment and make of it a real joy and delight.

It gives modes of expression to a boy who is slow or awkward in his spoken and written work. I have seen many cases where a boy turns with joy from the intellectual task, where he is considered by common consent to be a laggard, to the self-expression thru the industrial work.

The fundamental principle to be borne in mind in all educational work is that as far as possible the school work and the life-work shall go hand in hand—the brain and the muscle, the mental and the manual. This can be accomplished only thru a combination of the ordinary school work with the industrial phase.

I agree in the main with the paper and the discussion that has been given. I believe in industrial education in all the grades and vocational training in the upper grades for those who need it. But I am opposed to vocational training beginning at the end of the sixth grade. Neither the teacher nor the parent should decide for life what so young a child shall be. The child himself at so tender an age is certainly not mature enough to make an irrevocable decision as to the calling in which he will spend all of his days. This is a more serious matter than many people realize. A boy in the sixth grade determining to become a blacksmith, a carpenter, or a shoemaker! He may have the rest of his life in which to regret it. I wish to repeat that I am opposed to putting the choice of a profession too low in the grades. I see nothing in the industrial work suggested that would not be good general training for any child.

EDMUND A. JONES, state commissioner of common schools, Columbus, Ohio.—I wish to thank Dr. Downing for his able paper and for the full and clear statement he has given us in reference to what is being done in the state of New York along this line.

The paper read by Dr. Draper at the Cleveland meeting awakened a great deal of interest and caused some comment. I became so much interested in this subject that, in November, I visited some of the eastern cities for the purpose of studying the industrial problem. I spent some time at the Department of Education in Albany, visited the Springfield (Mass.) Technical High School, the Lowell Textile School, the office of the Massachusetts Industrial Commission in Boston, and several of the best manual-training, technical, and trades schools in Massachusetts, Rhode Island, and New York.

I was deeply impressed with the importance of the work that was being done in other states and, upon my return to Ohio, I made an earnest effort to secure the appointment of an industrial commission, representing the different interests involved, for the purpose of making a thoro investigation of the educational and industrial conditions of the state, and making such recommendations to the General Assembly as, in the judgment of the Commission, would best meet the wants of the youth and the industrial needs of Ohio. Unfortunately, or fortunately perhaps, the legislature was not in favor of commissions. But while we failed in this attempt we secured the enactment of a law which provides that any board of education may establish and maintain manual-training, domestic-science, and commercial departments; agricultural, industrial, vocational, and trades schools, and

kindergartens in connection with the public-school system and pay the expenses of establishing and maintaining said schools out of the public-school funds.

For three or four years the University of Cincinnati has offered co-operative courses in engineering. The university and many of the manufacturing concerns of that city have been working together to produce better workmen and better men. These courses are very popular and a large number are constantly on the waiting list.

One year ago a splendidly equipped technical high school was opened in the city of Cleveland, with an enrollment of between eight and nine hundred pupils. This school has no college preparatory course. All pupils who expect to enter a college must attend one of the other high schools. Of the number enrolled, it was found that more than four hundred would not have attended any other school, but would have finished their school education at the close of the eighth year in the grammar school. I am especially interested in these four hundred pupils, and in the much larger number who leave our schools before the completion of the elementary course.

The report of the Massachusetts Industrial Commission showed that twenty-five thousand children in the state of Massachusetts between the ages of fourteen and sixteen were not in school. Of this number, five-sixths had not completed the grammar-school course; one-half had not finished the seventh year, and one-fourth had not completed the sixth year. It was clearly shown that a large number of these boys and girls would have remained in school if the work had been so planned as to prepare them for greater industrial efficiency and to insure them a larger wage upon leaving the school.

We have one class of graduates from our grammar schools that enter our classical high school with a collegiate course in view. Another class enter our technical high schools with a view of becoming superintendents of workshops and factories and directors of workmen. Between these two there is a much larger class that must ever be the real wage earners in field and office, shop and factory. I believe these boys and girls have a right to a larger share of our attention.

Some eliminations can be made from our elementary course of study without loss to anyone. Much of the work in arithmetic, geography, drawing, and even in history can be given a stronger trend toward the industrial activities of the community. Our schools can be open more hours in the day and a greater number of days in the year for the benefit of these pupils.

At least some of the work that is now being done by correspondence and private schools should find a place in our public-school system.

We are living in an age of intense industrial and business activity. The lines of work now open to those who leave our schools are very different from what they were a quarter of a century ago.

We cannot change these things if we would. It remains for our public-school system to adapt itself to existing conditions. In the solution of this most important problem I am sure this National Council of Education will render most efficient aid.

J. A. SHAWAN, superintendent of schools, Columbus, Ohio.—We have all served our time at "elimination" and "simplification." Both are necessary; but I am willing to go one step farther and include another term in my creed—"differentiation." In fact "segregation" is bound to come whether we will or not, and I am not afraid of that term. Any segregation of five or six hundred American boys or girls must be essentially cosmopolitan. In life, men do not quibble about class distinctions. What they want is a job, and school is a preparation for life.

The most pressing problem today is—what to do for the boys or girls who must earn their living by the sweat of their brows. I am glad to see that this Council is seeking a solution for this problem. As educators we should solve it. But if we do not solve it, it would not be surprising to see in a very few years an industrial system of education paralleling the cultural system of today. My sympathy has ever been with the cultural. But

as we note the large number of overgrown pupils, whose only fault is a lack of interest in "book knowledge," held in the lower grades by the compulsory school law, one must pause, and reflect. Here is a great mass of good material out of which good American citizens must be made. The gentleman from New York has suggested the method—a separate school, partly industrial and partly cultural. The industrial will give an appetite for the cultural, but the latter must be reduced in amount, which can be done by segregation alone.

The little bill to which the gentleman who preceded me referred, and which was recently passed by the legislature of Ohio, makes it possible for any board of education in that state, which has the money and the disposition, to establish such a school. Acting under that law the board of education of the city of Columbus at its last meeting resolved to set aside a building in the central part of the city from which the school population had drifted away and to use it for an industrial and trade school. For the coming year, the school will confine itself to printing and woodwork which is fundamental in the trades. The universal use of the individual motor simplifies the equipment for the latter purpose.

It is the intention to run this school for twelve months in the year, with such evening sessions as may be found necessary. The attendance is to be voluntary with such suggestions as may seem wise to those who are old for their grades, i. e., the retarded and disinterested. To such the cultural alone does not appeal and it is manifestly unfair to send them out unprepared to meet the responsibilities of life or to make an honest living.

The school will give an opportunity for those who are compelled to leave school at fourteen to attend a part of the day or at night and further fit themselves for a self-reliant, industrious life.

CARROLL G. PEARSE, superintendent of schools, Milwaukee, Wis.—It has given me much pleasure at this meeting, as it did at the Cleveland meeting, to see the question of "industrial" or vocational education discussed at the sessions of the National Education Association. By discussion here and elsewhere, and by experiments of many kinds, we shall solve this problem and work out the correct system of industrial education as part of our public-school system. I cannot but be impressed, however, by the thought that this question will be solved, not necessarily because we are discussing it. It has already been taken up, and is being considered most thoroly and aggressively by other organizations. One of the most vital educational gatherings it has been my privilege to attend was held in Chicago a year ago last winter, under the name of the "National Association for the Promotion of Industrial Education."

But I consider it most unfortunate that, at the first meeting of that association, the former president of a great university, a man who is sometimes spoken of as the leading citizen of the nation, advanced the idea that the time has come for the schools to separate the children into classes before they have completed their elementary-school work, and that the school or the teacher should decide which children should be devoted to industrial employment and set to learning trades. The echo of this pronouncement has done much harm. I cannot bring myself to believe that in our country, with our social and industrial organization, anyone has a right to say which child shall be trained for a mechanic, and which one shall be a lawyer or a merchant. Perhaps in Europe with its stratified society, such a plan may be practicable; but in America, with its free movement of individuals from one stratum of society to another, and from one employment or vocation to another, no such plan is practicable or will be tolerated.

Industrial education with us can mean only opportunity. We cannot by prescription say to this boy, "Because your father was a day laborer, you must be a mechanic," or "Because your father was a blacksmith, you must be a blacksmith." Our educational system now furnishes opportunity; and when vocational training is added to the system, vocational training must be an added opportunity, and this only.

I have been impressed by the fact that most of the so-called "industrial education" talked about in this discussion has been not "vocational" or "industrial" education at all

but merely manual training. Placing thirty boys at benches to work at joinery is not "industrial"—in the sense of vocational—training, unless each of these boys is being trained to be a carpenter and joiner. Even if the man who instructs them is a practical carpenter and joiner, it does not make the training "industrial education" or "vocational training," unless each of these boys is fitting himself to work at the carpenter trade.

I do not believe we should in the public schools put boys and girls of twelve or thirteen years at the work of preparation for some trade. Their general education should continue until they have finished the grammar-school period. Specialization before the end of the grammar school seems out of place. Children of this age are not sufficiently matured in bone and muscle or in nerves to begin vocational work; nor is the maturity of judgment such that the child is fitted to work at a trade or should, at this time, make a choice of the vocation or employment which he will follow. By allowing or requiring children to choose and begin preparation for a vocation at this stage of their education we should be using unseasoned sap wood, which ought to be allowed to mature before putting it to the stress of vocational employment. Colts are sometimes run as two-year-olds, but this practice is not generally considered sportsmanlike in the best sense, and it is noticeable that those colts who are run as two-year-olds seldom make high-class records as four- or five-year-olds.

We should so shape the education given in our elementary schools as to develop in the best way the boys and girls who attend them, and to turn out capable, well-disposed American citizens. The work of fitting boys and girls for vocations, particularly for mechanical vocations, should be delayed until after the elementary or grammar-school period has passed.

I wish to say that what I said previously in the discussion was said after an acquaintance of some years with one of the most successful trade schools in this country, and that the statements I made were, to some extent, the outgrowth of experience in connection with that school.

I believe it unwise to put boys and girls of elementary school age at the preparation for special vocations. Our social and industrial organization, as well as the physical condition of pupils at that age, render it inadvisable. I do not believe this Association should pronounce itself in favor of such a plan.

It was no doubt proper a generation or two ago for boys and girls to work with their fathers and mothers at the family vocation, learning the elements of that vocation in their tender years. They worked under the care of those who had the deepest affection for and interest in them. They were taught those things which they could, at that age, properly learn and they were allowed to do only those parts of the work which they could do without injury. But sending boys and girls to work for other people in factories or shops, without the oversight of their natural guardians, is unwise and will too often prevent the best ultimate development of these young people. And the public schools cannot attempt to determine their vocations; nor should we give them a training to send them with defter fingers at an early age into the shops and factories. We should study the best future interests of the boys and girls, not how they can be quickest fitted to enter the shop or factory and earn a small weekly wage. The best future citizen is the ideal; not the more skillful boy or girl operator of the loom or spindle or sewing machine.

REPORT OF COMMITTEE ON CO-OPERATION WITH EDUCATIONAL ORGANIZATIONS IN OTHER COUNTRIES

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The Committee on International Relations of the National Council having asked me to prepare a report for presentation at this meeting, I beg to submit the following statement and recommendations:

At its meeting in Los Angeles in 1907, and again at Cleveland in 1908, the Council discussed, in a preliminary way, the desirability of some concert of action as between the National Education Association and similar societies in other lands, particularly in the consideration and discussion of educational questions of an international character. The advantages of such a program have been set forth, together with the obstacles it would undoubtedly encounter. The ends to be gained are sufficiently great and obvious to render it desirable that some definite steps be now taken toward their accomplishment. But the actual difficulties and the doubts as to the best procedure are also so obvious and so great that it would not seem wise to commit the National Education Association to a definite policy in the matter until preliminary overtures have been made to some of the leading foreign societies whose co-operation is desired.

It is accordingly recommended that the National Council at this meeting appoint a Committee on International Correspondence; that this Committee be instructed to enter into communication with representative educational bodies of other lands, with a view to learning whether they would regard the program here referred to as practicable and desirable; and that the Committee be further directed to report the results of such correspondence at the next meeting of this Council.

While such a Committee should be given the largest possible discretion in the preliminary correspondence, and the instructions proposed above are probably sufficient, the following additional suggestions are offered:

We may suppose that at the outset but little more can be done than secure an agreement between two or three societies in as many different countries that at their meetings of a given year they will discuss some one or more designated topics; that the views set forth in such discussions shall be communicated by each of the co-operating societies to all of the others thru its committee of correspondence; and that such reports shall be considered by the several organizations at their meetings of the following year.

A desirable extension of this arrangement would be that of having a representative of one organization visit one or more of the others, by previous arrangement, and give a personal account of the course of the discussion in the society of which he is a member. Such international visits, even apart from any general plan, have been a source of much profit and enjoyment at several meetings of our own National Association.

As an indication of a possible course of these discussions, the following topics are suggested for the first year:

1. What culture materials are now available for common use in the elementary and secondary schools of all nations?
2. What culture materials of any given nation are to be regarded as necessary to the cultivation of its proper sense of nationality, and, therefore, as necessarily and permanently distinct from the culture materials appropriate to the schools of other lands?
3. In the case of educational materials which are identical or closely com-

parable in the schools of different countries, what norms can now be established as representing the attainments that may fairly be expected of students representing ordinary scholastic conditions, at certain transition points or terminal points in the school curriculum?

These topics raise, in different forms, one question of vast significance. It is the question: How much of international accord in educational concerns is now desirable and attainable? I cannot resist the conviction that the time has come for a serious consideration of this question. Some better ways should be devised by which any people may learn whether it is in agreement with the best educational practice of the world. Any nation may for reasons of its own break sharply with the educational practice of the rest of the world; but in such a case it has nothing to lose from a fair examination of the reasons for such variation.

An additional question presents itself, closely connected with those which have been enumerated: What are the best things that any nation has to set before other nations as its contribution to a better world standard in education? This is, in reality, the question that has been foremost in the educational exhibits and congresses of the occasional world expositions which have been held during the past half-century. It may be guessed that a continuous effort of the nations to understand one another educationally, in the way that has been suggested in this report, might give greater coherence and effect to these occasional conferences and exhibitions.

It can hardly be doubted, moreover, that a continuous and concerted effort to understand one another educationally will foster mutual respect and good will among the nations. Such a result is, indeed, the highest practical outcome to be hoped for from the procedure which this report contemplates. If the plan that is proposed shall be successful, it will in effect be nothing less than a substantial contribution to the effort to secure the peace of the world thru a good understanding among nations, and the fostering of international justice.

One of the practical difficulties of the program that has been outlined arises from the fact that the educational societies of other lands are not comprehensive of all grades and types of education as is our own National Association. It is not always easy to say what is the organization in any given country to which our overtures would most appropriately be made. A selected list of such societies, however, has been prepared, which will be placed at the disposal of the proposed committee if such a committee shall be constituted by this Council.

THE PROGRESS OF EDUCATION FOR THE YEAR

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Ordinarily the progress in education is so gradual that it is quite difficult to select events that mark epochal changes. A clearer view here and a practical advance there attract the attention of those who are responsible for the

management of educational affairs. That which at first seems theoretical and incapable of practical application slowly finds its way into the schools and men wonder why it was not always there. Usually these instances of progress are isolated and individual. They need to be greatly multiplied before they attract the attention of the general public and awaken such popular sentiment in their favor as to be incorporated into systems and thus to attain something like universality.

Existing laws constitute a frame which often places a grave limitation upon possible progress. Individual schools are frequently found that are far better than the statutes authorizing them. A general progressive movement is impossible, however, under an antiquated and repressive system. Making a full allowance for the conserving effect of tradition, it is still a matter of constant surprise to see the public clinging to a system whose only merit is that it was originally introduced when something was necessary in the way of organization and the school authorities knew of nothing better.

As general legislation reflects the sentiment of the people more accurately, perhaps, than any other social phenomenon, and as modifications of existing laws are necessary to any free growth along many lines of progress, the legislation upon educational subjects for the past year furnishes an interesting topic for study.

In this particular, as well as in several others, what we know in this country as "The South" has made notable progress within the last twelve months. Kentucky has recently set a mark for other states to move toward in the establishment of a county system which promises to be elastic enough to furnish free scope for local initiative, and centralized enough for efficient administration. Per contra, Illinois clings to her old clothes as if the fashion of this world were incapable of change.

In several of the states educational commissions, provided by the general assemblies of two years ago, have been very energetically engaged in codifying existing statutes and proposing marked modifications of venerable systems. The Kentucky advance is mainly due to such an arrangement. In some of the other states, however, and notably in Illinois, the work of these commissions has not met the approval of the legislatures. Their labors have not been fruitless, however, for never before have educational questions been so thoroly discussed by the lawmakers of the country. It is confidently believed that the next sessions of the general assemblies will accomplish in the most conservative states what has been done in those most ready for progress.

A most notable movement in the South is directed toward the establishment of county high schools. In some of the states provision has been made for at least one in each county, while in others four times as many are authorized. The state appropriations vary greatly, but the minimum is about two thousand dollars. When the localities are ready to make their offering the state authorities give them a hearing. The superiority of conditional appropriations, dependent upon the amount raised by local taxation, is abundantly demon-

strated, and the unconditional state-aid scheme is now regarded by many of the wisest educational men as a curse rather than a blessing. Support of schools by local taxation is new to many portions of the South. Such a policy, however, has had a remarkably rapid development and is destined soon to become universal. Notable campaigns have been conducted in the interests of the extension of that method of maintaining the instrumentalities for popular education. The South lost a great propagandist for that cause in the death of the lamented Dr. McIver. Conditional state aid is proving to be a great promoter of this necessary movement. It is the old story over again: people value what they have to pay for. Alabama has had no state high schools, but under her new law forty-seven counties have applied for assistance. The law requires at least five thousand dollars and five acres of land from the locality. Thus far the minimum local offering is eight thousand dollars, and in one instance it has gone as high as fifteen thousand.

Agitation has begun in Arkansas for a similar law. Florida has forty-five senior high schools, sixty-five junior high schools, and forty rural graded schools in her forty-six counties as an outcome of the law of 1907. The localities must bear three-fourths of the expense of maintenance; forty of the fifty-nine counties of Louisiana have approved high schools. Mississippi has a plan for state assistance to county agricultural high schools. Virginia recently appropriated twenty thousand dollars for two years to begin the establishment of chairs of instruction in agriculture and domestic science in one high school in each of the ten congressional districts. Kentucky has recently made provision for one or more high schools in each county and the statute seems most admirable in its details. Indeed, wonderful things have been doing in that state; one of the most interesting is a recent "whirlwind campaign" for the toning up of public sentiment and bringing it to bear upon the state legislature. It seems to have had the desired effect.

The citations made must suffice to illustrate the more recent development of secondary schools in the South. It requires slight reflection to see the bearing of this movement on schools of all grades. On one side they will contribute richly to the attendance at the universities from a class heretofore unable to bear the expense both of preparatory and university tuition; on the other hand, they will furnish a growing contingent of more liberally educated teachers for the elementary school, and it is a wise scheme for each section of the country to utilize its own people as instructors. The profound significance of this movement cannot be overestimated.

More and more it is becoming apparent to the public that the best way to make a good school is to hire a good teacher. Everywhere the movement is on for the improvement of the teaching body. Utah strikes a keynote for the newer states in declaring that after 1910 no one will be admitted to the examinations for teachers' certificates who has not had four year of high-school education, or its equivalent. Teachers who have already served three years in the state are exempted from this requirement. Pressure is brought to bear

upon the students in the state school of education to remain long enough to obtain a degree, diploma, or certificate by enforcing a forfeiture of free matriculation in the event of their failing to do so.

Wisconsin is now in the van of the western states and, indeed, of all of the states, with two or three possible exceptions, in furnishing schools for the professional training of teachers. Her eight state normal schools give her the finest showing when compared with her population. She is an undisputed leader with the county training school. Her recent legislature provided an increase of four upon the twenty now in operation, and Superintendent Cary writes me that there will soon be a county normal training school in every county in which there is not a state normal school. At first the state normal schoolmen were apprehensive that these schools of lower grade would diminish the patronage of the higher institutions. Events have demonstrated the groundlessness of their fears. They have proven to be excellent feeders instead. They have done more than all previous efforts combined for the betterment of the teaching in the country schools of the county in which they have been established.

The idea of attaching a normal department to high schools is by no means a new one, as New York has long utilized such educational agencies for the preparation of teachers. The province of Ontario regards such an arrangement as one of its most satisfactory devices for that purpose. Indeed, it is somewhat surprising that it has not been more generally utilized. Nevada is the latest state of which I have knowledge to make such a provision, her legislature having authorized, at its last session, the establishment of normal training schools in connection with her county high schools.

The commonwealth of Virginia has been making such notable progress latterly as to make it a trifle difficult to keep run of her achievements. Reference has been made to her encouragement of the teaching of agriculture, domestic economy, and other manual arts; but it was not stated that the last legislature doubled the appropriation for high schools, the number of which has now been increased to three hundred and twenty-five, and also made an appropriation of fifteen thousand dollars for a normal training department in twenty high schools.

In further illustration of the movement for a better teaching body, it is worth while to mention the liberal policy adopted by the Pacific states, and some others, in giving to graduates of state normal schools in other states the recognition accorded to the graduates of their own normal schools. Upon the recommendation of the administrative officers of such institutions, the departments of public instruction have awarded state certificates to graduates seeking employment in their communities. In consequence of such recognition, and attracted by the liberal salaries offered, large numbers of superior young men and young women have left the Mississippi Valley states and have thus given to the West a splendid reinforcement in the way of a superior teaching body. State Superintendent Chamberlain, of Idaho, writes that they endeavor to

employ only normal graduates for their rural schools. In what happy contrast is such a condition with that of my own state, where last year there were several thousand persons teaching in her district schools who had received no education beyond that furnished by substantially the same schools as those in which they were teaching! The question of good schools is mainly one of salaries. "Good money" will get good teachers, and the far West is reading a lesson that the country at large would be wise to regard.

The appropriations for state normal schools are steadily increasing. Where it was a struggle a few years ago to induce legislative bodies to furnish reasonable, or even meager, support, and then in such a half-hearted way as to put such schools in the category of public beggars, the appropriations are now liberal and are made as a matter of course. The normal-school principal no longer hangs about the corridors of the capitol, seeking his opportunity to win here and there a convert to his cause. Special committees, having his affairs in hand, call him when he is needed for their instruction, and it is by no means an unknown occurrence to increase the amount for which he asks on the ground that from the standpoint of the committee it is inadequate.

In even a superficial study of educational conditions nothing is so transparently apparent as the effort everywhere to make schools "practical." The age is so preponderatingly industrial, and the youth of the country manifests such an ardent desire to prepare for lucrative employments, that the demand upon the school for help is tremendously in evidence. We have found at last a complete negation of the old classical tendency as a dominating influence in the school. It would be an easy matter to occupy all of the time allotted me with quotations from letters upon this subject written by the leading educational officials of the country.

Secretary Martin, of Massachusetts, writes: "Thru the efforts of the State Board of Education there has been during the last year a stirring of public interest in the matter of teaching the arts of country life, especially agriculture and domestic science. Under the term of 'industrial education' there has been more newspaper discussion of education than I have ever known in the past. Straws indicating the general tendency are the establishment of a High School of Commerce and the Girls' School of Domestic Arts in Boston and the opening of a Department of Business Administration in Harvard University."

State Superintendent Cook, of Wyoming, writes: "There is a marked disposition on the part of many of the schools of the state to make their high schools preparatory schools for 'life' rather than for college."

Superintendent Fairchild, of Kansas, writes: "Forty-three high schools are now giving instruction in manual training; twenty-three high schools are giving instruction in agriculture; the state university has extended the list of subjects accepted for entrance to include courses in business, manual training, and agriculture. Fifty thousand dollars was recently appropriated to establish manual training in a hundred high schools in the state."

"The present legislature, by appropriating \$160,000 for the establish-

ment of four agricultural schools, has taken the first decided step in this direction," writes State Superintendent Cook, of Arkansas. He adds, "There is a growing and active sentiment to emphasize the practical training in high schools rather than preparatory training for college."

But I have made quotations enough. It is the ever-present note in all reports of educational conditions. My theme is "The Educational Progress of the Year." It is possible that not all of my hearers will regard these facts as falling under that caption. I shall not agree with them. They point with unequivocal significance to the belief in the possible efficiency of the school, and with quite unerring precision to the place which it is to fill among the social forces of this country. They say, in effect, our future is bound up with the work of the teacher. To him we are to look for the solution of our main social problem, and we, the people, will so equip the school that it shall splendidly achieve its superb function.

Notwithstanding the continued urbanizing of our people, there is a clear note sounded which is full of cheer for the rural school. Does it indicate a reflux wave from the city, a growth in school sentiment among the farmers, or both? Oregon reports an advance of 50 per cent. in ten years in the salaries of teachers of country schools. It is not an unusual occurrence for school directors to offer sixty dollars a month in the little schools of northern Illinois where an enrollment of twenty is rather remarkable, and where eight or ten is a familiar number. The hope of the country really lies in the consolidated school, and when farmers like John Swaney, whose name has become a household word to those especially interested in such schools, are willing to devote some of their surplus money to its endowment we shall have educational conditions in rural life that are quite ideal. A fine building, seventeen acres of land, an agricultural experiment station under the direction of the state university, conveyance of children to and from school, first-class teachers, a community thoroly awakened because of the chances for its children—these are conditions that are radiant with promise for the country child.

And now permit me to summarize as I approach the limit of my time. The universities are crowded as never before. Short courses for farmers' boys and girls are becoming familiar attachments to farmers' institutes. Boards of supervisors are willing to make appropriations for this purpose, as is indicated in my own locality where they freely voted three hundred dollars to bear the expenses of a five-day course in the normal school where the county farmers' institutes are held. Specialists are to come from the university and the boys and girls are to have a week of the best instruction that can be afforded them in subjects connected with rural life. A few years ago these supervisors were scoffing at scientific farming. The state universities continue to add pedagogical departments, Vermont being one of the latest, and completer facilities in all departments are a part of the current news, Minnesota especially having made notable additions recently. The free textbook movement is on the gain; compulsory laws are more efficiently enforced, the people evidently coming

to the idea that they are beneficial instead of being an abridgment of personal liberty. Pensions for teachers are coming, Colorado furnishing an illustration of recent action by state legislatures. From Texas to Idaho comes the announcement of larger authority for those in immediate charge of the schools, and a warmer interest in education on the part of legislative assemblies. Maine has doubled her state tax and now distributes a half-million dollars more than Illinois; has increased the minimum number of weeks that towns must support schools by 30 per cent.; has established a new normal school; passed a medical inspection act, and adopted a number of other improvements each of which scores an advance upon present conditions. The news from the provinces is equally encouraging. While I have no special message from the Philippine Islands, Superintendent Babbitt, of Hawaii, writes most encouragingly with regard to educational advance. The schools have never been so well housed; no public school is without a school library, greater progress having been made in the current year than in any previous year. An increase of sixty-nine thousand dollars in the school budget makes an upward movement in teachers' salaries possible. Consolidation is making some progress and the general outlook is, in all ways, brighter than ever before. Commissioner Dexter, writing from San Juan, reports school matters as in an extremely prosperous condition on the island, the teachers being the best paid in any country, the average for the seventeen hundred being fifty-three dollars per month. As Commissioner Dexter is to be present at this meeting, some surprising announcements may be expected with regard to education in Porto Rico.

It is evident that there is no diminution in the sociological ferment that has been agitating society for the last few years. The conviction is deepening rather than weakening that the leading function of the school, so far as our industrial population is concerned, is to aid them in acquiring the greatest efficiency possible in earning their living by furnishing specific instruction in arts and crafts; by inculcating habits of cleanliness, industry, and sobriety; by preparing the girls to cook well, to maintain hygienic homes, to serve well in all of the employments to which they may aspire. In some localities there is a strong protest against any other additions to the curriculum. From the literary side it looks as if the three R's might be restored to something of their early predominance.

Does this indicate a sharp social cleavage in the schools? If so it is not an advance. Must those who seek for their children what we have been accustomed to call a liberal discipline depend upon private enterprise to supply the means for it? That the trade schools are headed this way seems beyond question; that they will be something more than trade schools is equally beyond question. The traditions favorable to liberal education will not be without an influential word in the final determination of our educational policy if such a determination shall ever be final. Some forecast of what is to be is foreshadowed in such wise projects as the Rochester Factory

School; meanwhile, the ranks of the reformers are rapidly filling and all seem to be astir.

This report would be very incomplete without some brief allusion to the remarkable activity of the magazine people, as well as the daily and weekly press, in discussing educational questions. The Bureau of Education is laying upon our tables such riches as never were as a result of its discriminating investigation. Educational life everywhere seems to be full of energy. When China determines to discard the old examination system, to which she has clung for centuries, it is obvious that even the sleepy contingent of the Orient has been invaded by the modern spirit. What may we not look for in the near future as the outcome of the educational agitation of the last twelve months? Evidently the day of the schoolmaster is at hand.

Altho not immediately germane to this discussion, I cannot forbear a brief reference to a recent event that interests all educational people everywhere. The distinguished teacher who, for so many years, has held his calm pre-eminence, has at last retired from the field of his fruitful labors to sit among his sheaves. The eyes of the educational world are turned with fond devotion to the seat of the ancient university over whose affairs he has presided so long and with such distinguished success. May the afternoon of his beautiful life linger long and lovingly to the close. Charles Eliot, President Emeritus of Harvard University, will continue to be President Emeritus of that vast multitude who have so long looked to him as a leader in the educational advance of the modern world.

THE SUPERVISION OF RURAL SCHOOLS

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If you wish a mess of trout, you must first catch the fish. If you desire satisfactory supervision of rural schools, you must first secure an efficient supervisor. The hook and bait by which you can catch him is an adequate salary. On no other hook can you hold him for any length of time. Strong men are made in the country, but they are apt to gravitate toward the cities.

In rural communities with urban conditions the problem of school supervision can be solved without much difficulty. In such communities there is enough taxable property to provide the revenue necessary to pay adequate salaries to those who supervise as well as to those who teach. Money always attracts talent. The choice of an educational expert as superintendent and the employment of the teachers whom he selects after personal inspection of their work, will, in no long time, result in good schools.

In sparsely settled districts the solution of the problem is more difficult. Good schools can never be made cheap, and if the state does not provide for the major portion of the superintendent's salary, the schools become top-heavy with supervision. No amount of supervision can atone for lack of teaching ability in those who have charge of the schools.

To give the rural schools some degree of supervision the office of county superintendent was created. In the West where the superintendent has charge of less than one hundred schools, the supervision may be comparatively efficient; but in the more thickly settled counties of the East, where the superintendent has the oversight of from three hundred to more than a thousand schools, and where he cannot visit each school more than once a year, or even once in three years, the supervision becomes very superficial and unsatisfactory. Says Commissioner Draper: "All who have any understanding of our schools see that their excellence depends upon the quality and closeness of the 'supervision,' and all who are familiar with the schools of New York know that there is no school supervision in the rural districts of the state, in the sense in which the really capable men and women of the schools now use the term." How many of us are obliged to make a similar confession with reference to the rural schools under our jurisdiction!

It is well to keep in mind the difference between the functions of a superintendent and those of a supervisor. The duties of the former are largely administrative, whilst supervision has to do with methods of teaching, habits of study, and the adaptation of the curriculum to the needs of the pupil and the community. Next to health, the most valuable possession of the child is time. By the highly refined methods which have grown out of so-called development lessons, the instruction is sometimes given as if the pupil had the years of Methuselah in which to grasp a single idea. To prevent the waste of time and effort on the part of both teachers and pupils, to bring the skill, the experience, the wisdom, and the spirit of a good teacher to bear upon all the work of the school, to prevent the retardation and elimination of pupils as they pass from grade to grade, and to give the community an adequate return for all the money extracted for school purposes from the purses of the taxpayers—these are legitimate functions of the supervisor.

Both the superintendent and the supervisor should aim to create educational sentiment. The schools cannot be made better than the people want them to be, nor can their efficiency lag much behind the demands of public opinion. Farmers' institutes, mothers' meetings, graduation exercises, county and local institutes, and other public gatherings furnish splendid opportunities for the creation of educational sentiment. The creation of a demand for good schools is fundamental in all educational progress. Public addresses should be supplemented by visits to the homes of those who are the leaders of thought and action in the school district.

In the next place, the superintendent or supervisor should endeavor to make the teachers happy in their work. The best progress is possible only where pupils and teachers are happy in their work; where the school is the place to which the children like best to go; where pupils, parents, and teachers cherish the sense of something to be achieved, and where they realize the function of the school as a factor in the uplift of humanity. The worst service which a supervisor can render is to give the teachers a bad conscience with

reference to their work. This robs them of all joy in teaching, deprives them of sound sleep, makes them nervous and unfit either to govern or to associate with children, and defeats the chief purpose for which the schools were established.

In the third place, the people of the rural districts should be made to think and feel that their boys and girls are just as good and deserve just as much and as good schooling as the boys and girls of the cities; and further, that it is impossible to have good schools anywhere without paying for them. The average country man is a reformer. He wants legislation that will make the other fellow pay the taxes. Sometimes by giving his children poor schools he taxes his own flesh and blood in order to lower the taxes on his own acres and his neighbor's property. Avarice of this sort is best overcome by appealing to the ambition which fathers and mothers naturally have for the future success and welfare of their children.

In the fourth place, the superintendent or supervisor should be familiar with the educational problems which spring up with each step of progress. Consolidation of schools is a big step in advance. It raises new questions of sanitation, government taxation, and transportation.

I close as I started, by laying emphasis upon the supreme importance of selecting the right man or woman to supervise the schools. In no other direction is it so easy to fool the people. Ask the average taxpayer, "How does the superintendent earn his salary?" The reply may be, "By following a vigorous policy of doing nothing." Usually women are more painstaking than men in matters of detail, but recently I heard of a woman superintendent who gave every applicant a license to teach, praised the work in every school, had a good word for everybody, and it was almost impossible to dislodge her from the office of superintendent, altho no results were visible from her visits and her inspection. Tenure of office should depend upon the results achieved. A question of primary importance is, therefore, the question of the selection of the superintendent. Shall he be elected by popular vote? Where popular election has resulted in the choice of the driver of a beer wagon as superintendent, or in the election of a person so illiterate that he could not pronounce a column of words accurately, the people say that the selection of a superintendent by popular vote is the way not to do it. Shall the superintendent be appointed by the state board of education? When the superintendent thus appointed continues to practice law or to serve as vice-president of a bank or in some other exacting vocation, it is positive proof that politics has crept into the state board of education. My own preference is election by the school directors or trustees, ratified by the issue of a commission based upon academic and professional qualifications. But so long as human nature is frail, no method of selection is entirely free from mistakes. Above all things, we need colleges of education manned by faculties who know schools as well as books; who know practice as well as theory; who have common sense enough not to spend their time and energy by soaring into the sky and searching for data

which have absolutely no bearing upon the education of the child and the efficiency of the schools.

Hence, if you wish satisfactory supervision of rural schools you must provide adequate revenues, a realm of activity for the supervisor that does not make supervision a physical impossibility, and above all you must find a supervisor who can create educational sentiment, who can make pupils and teachers happy in their work, who can get and save and wisely apply the money of the taxpayer, and who can bring to bear upon the schools the wisdom, the experience, the skill, the scholarship, and the common sense of a first-class educational expert.

DISCUSSION

ROBERT J. ALEY, state superintendent of public instruction, Indianapolis, Ind.—I am in hearty agreement with all the points in the splendid paper by Superintendent Schaeffer. I desire to emphasize and view from a somewhat different angle a few of the suggestions.

The supervision of rural schools will be better when it is closer, when teachers are better prepared and better paid, and when the public reaches that stage of development that it really wants better schools. These three points are so intimately connected that no one of them is independent of the others. The complete realization of any one of them will carry the others with it.

Closer supervision requires smaller groups of teachers than are now placed under the direction of one man. No one man can properly supervise more than fifty or sixty teachers if they are scattered over several hundred square miles of territory. The county superintendent with from one hundred to five hundred teachers under his care, and with a great multiplicity of clerical duties to perform, can do but little effective supervising. He needs assistants, well trained and well paid, who will devote their entire time to the direct work of supervision. These assistants should be responsible to the county superintendent and work under his direction. They should have control of from thirty to sixty teachers, the number depending upon the topography of the country, the density of the population, and the amount of school consolidation that has taken place. These assistants and the superintendent should work with the teachers in about the same way that similar work is carried on in a good city system.

Supervision of this sort would make it possible to improve the school work in every detail. The course of study could be administered properly and made to do all that it is intended a course should do. Any desirable forward movement could be carried thru easily. The beginning teacher could be directed and many failures turned into successes. The pedagogy and schoolroom practice of the entire teaching force could be greatly improved. Desirable uniformity in all important things could be brought about easily.

Supervision of this sort could be brought about without disturbing present organizations or laws. In my own state in quite a number of instances school townships have united in the employment of supervisors of music, art, and manual training. These supervisors work under the direction of the county superintendent. The results attained in all these subjects under this plan are nothing short of marvelous. A similar plan for general supervision could be easily arranged. That results of the greatest value would follow such a course no one need doubt.

Better preparation of teachers and better pay are inseparably linked together. We cannot have the first without the second and we ought not to have the second without the first. In several states laws are in force placing a premium in pay upon preparation. These laws also make entrance to teaching more difficult than heretofore, by requiring

certain scholastic and professional standards to be met. These laws are meeting with popular favor. They are filling the schools with teachers of higher grade. Another result of the greatest importance is that more strong and promising young people are looking toward teaching as a career. This tendency will increase if the pay is made better and a sufficiently high preparation required to give to teaching the tone of a profession.

But what has this better preparation and better pay to do with supervision? It has several important things to do with it. Such teachers feel the need of help and direction from those above them. They realize that economy in teaching can come only thru a well-organized and properly directed system. They know enough to feel the need of supervision and they have the courage to demand it. When the schools are filled with such teachers, better prepared county superintendents will follow as a necessary corollary. Teachers who are in the business to stay will be so thoroly enthusiastic that the community will be impressed with the need of better things.

That much depends upon the sentiment of the community is well known to every experienced educational worker. The people will not be driven to have good schools. Permanent good schools are never any better than the community wants. Any advance movement is largely lost unless the community is rapidly educated up to it.

Supervision is not possible where the prevailing feeling in the community is against it. Its values must be exploited. The citizens must be taken into the confidence of the school officials and must be shown the great return that will come to the community if the schools are made better thru supervision.

Every teacher and school official who feels the need of an improved system of rural-school supervision should join in an effort to make all patrons aware of its importance. The subject should be talked about. It should be written about. At all parents' meetings and school entertainments at least one short, crisp speech should be made on this subject.

The American parent prizes his child and is willing to make sacrifices for his welfare. The tactful teacher who wins the respect of the child need have but little trouble in securing the enthusiastic support of the parent for any reasonable school need. If the teachers will inform themselves thoroly upon this subject, they can do much to better their own condition by bringing about a system of closer supervision.

Wherever conditions are favorable, supervision will be greatly aided by school consolidation. The consolidated rural school with five to ten teachers becomes an object-lesson to a much larger territory than that of its patrons. In large areas of our country physical conditions are such that complete consolidation is impossible. In these regions the only hope for improvement is in closer supervision. We must have it in order that we may do justice to the children.

Close supervision will unite the teachers in common movements; will multiply greatly the power of the individual teacher; will save directly and indirectly present waste in the daily work of the school; will make the teacher happier and more joyous thru co-operation, and will greatly increase the general culture that will come to every child.

JOHN MACDONALD, editor of *Western School Journal*, Topeka, Kans.—The county superintendent can supervise his schools a great deal easier in these days than he could have done twenty or more years ago. In those days, there were no telephones nor rural delivery. If trouble came up in a district it was a slow process to get into communication with the center of disturbance, and the superintendent probably would be obliged to go out eight, ten, or more miles to confer with officers and teachers. Now, he can settle nearly all difficulties thru the telephone without leaving his office; also can do much of his supervisory work. Probably, under these modern conditions, the number of schools placed under the superintendent is not too great.

The rural school has been the Cinderella of our system. Her proud city sisters have looked down upon her with contempt. But now the country school is receiving attention.

One day when the Committee of Twelve on Rural Schools was in session in Chicago,

the members, after half a day of discussion of rural-school imperfections, were feeling particularly "blue." They had been taking the testimony of eighteen experts from various parts of the country, and the information given was of a depressing character. I interrupted the work of the committee to ask this question: "How many of you members of this Committee, and of you who are here by invitation, received the rudiments of your education in the rural schools?" Every hand but one went up and the exception was Albert G. Lane, who was educated in the city of Chicago.

If the country school can do so much, hampered as it is by manifold imperfections, what could it not do were maintenance more adequate and supervision more systematic?

A. C. NELSON, state superintendent of public instruction, Salt Lake City, Utah.—It is impossible, in the time assigned me, to discuss and emphasize, as I should like, the many excellent suggestions brought out in Superintendent Schaeffer's address and by Superintendent Aley's paper on rural-school supervision. This subject is of such great importance that, however we may be curtailed for a want of sufficient time to discuss it in its most important aspects, the National Council of Education has acted wisely in making this phase of our school work a prominent feature of the deliberations of this meeting.

Expert school supervision is of comparatively recent date in this country. The origin of the office of city superintendent does not reach far back into the history of our educational growth, and even now each year gives us a clearer and a better defined idea of his duties. But the question, the need of school supervision in cities, is now definitely settled and in most of our large cities adequate skilled supervision is supplied.

To anyone familiar with the conditions of our rural schools, the necessity for a better and a more extended supervision of them is so apparent that no argument is needed. It is very evident that the county superintendent, however active he may be in the discharge of his duties, cannot render the schools under his charge the supervisory aid which they demand. His schools are, in most instances, far too numerous, his teachers too large in numbers, and the area of the territory embraced in his county is too great.

Until something can be done to relieve this condition and to reinforce the work of the county superintendent, our rural schools will suffer a lack of efficiency. Perhaps no better service can be rendered to our school at the present time than to assist in the solution of this problem. One feature which makes the question under discussion somewhat difficult in its solution is the fact that its need is not sufficiently apparent to the layman or school patron to receive such co-operation as is indispensable to administrative school improvement, as well as to other phases of educational growth. If better and more extended rural-school supervision were forced upon us wholly as an external sociological demand—such as industrial education—all that would be necessary would be a just recognition of such requirement followed by a proper educational adjustment—such adjustment as would satisfy the demand. But its solution is more difficult, tho to the school official acquainted with the needs of rural-school improvement its importance is no less apparent.

Another cause which retards the bringing-about of a sufficient supervisory force for the rural schools is, in my opinion, the present administrative organization of the social school unit—the old traditional township or the school-district unit.

Of recent years we have done much toward consolidation of schools, but our consolidation has been chiefly one of transportation of pupils to larger school centers where pupils might have the advantages offered by the graded schools. This is commendable and it has been fruitful of excellent results, but there is a phase of school consolidation that affects school administration which will do much toward the solution of the problem under discussion. The administration of the traditional school unit is too conservative and in too many instances incapable of adjusting itself to the demands for more extended and more effective supervision. This phase of consolidation, let me emphasize, concerns itself with school administration. Under the present administration of the school-district unit, the area embraced in the territory of the district may be too large or too small for effective work

in supervision—too large, so as to render it inconvenient as a working unit; too small to make it possible to provide sufficient revenues. A readjustment of the school unit and of the organization of the school board would do much toward the solution of our problem. The changes here advocated are not theoretical only, but, in my state, actual practice has demonstrated their value. Instead of the traditional school board, provide one consisting of five members who are to have jurisdiction over a school unit large enough to employ from one hundred and fifty to two hundred teachers. This board should have power to levy a uniform local tax sufficient to assist in maintaining schools and to employ an efficient superintendent and a corps of competent supervisors. The work of these supervisors should be done under the direction of the superintendent, and it should be sufficiently extensive to cover all phases of the common-school curriculum.

In our school methods and our school curriculum there may be danger of "standardizing" our work too much, but in our rural-school supervision there is at present a woeful lack of a well-defined plan of operation.

G. M. PHILIPS, principal of the State Normal School, Westchester, Pa., and secretary of the State Commission which recently prepared a new school code for Pennsylvania.—The Commission which prepared a school code for Pennsylvania during the last two years had, as perhaps its most insistent problem, that of closer supervision of the rural schools. Pennsylvania is peculiar in having many very populous counties. One county superintendent now supervises about fifteen hundred schools; two others supervise from eight hundred to nine hundred schools each; half a dozen more, over six hundred each, and many from four hundred to five hundred each, and these larger counties cover an area of a thousand or more square miles each. The Commission planned that a county superintendent who had from one hundred and fifty to three hundred schools should have one assistant superintendent. When he had from three hundred to five hundred teachers, two assistants; with from five hundred to eight hundred teachers, three assistants, and for every additional four hundred teachers, or fraction thereof, one additional assistant. The Commission realized the inadequacy of this but felt that no more could be secured at present. The Commission further recommended that these assistant superintendents should be appointed by the county superintendent for a term of three years, with the approval of the officers—five in number—of the County School Directors' Association, a standing body authorized by law.

The minimum salary to be paid was twelve hundred dollars, and this was to be paid out of the state treasury as our county superintendents are paid. The triennial convention of school directors of the county might increase the number of assistant county superintendents, or authorize the appointment of county directors of music, manual training, etc., at the expense of the county—that is, their pay must come out of the state appropriation for public schools to the county; and in the same way this triennial convention might increase the pay of these assistant county superintendents. The duties of the assistant county superintendent were defined in the code, but they were subject to the control and direction of the county superintendent.

The governor felt obliged to veto the act providing for this new code because of the mutilations which were made in it during its passage thru the legislature and afterward, but it is to be hoped that the whole code, and especially this feature of it, may bear fruit in the near future.

THE ADJUSTMENT OF THE SCHOOL SYSTEM TO THE CHANGED CONDITIONS OF THE TWENTIETH CENTURY

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Most educators appreciate the fact that there must be changes in our system of education to suit the changed conditions of the time, and some, like Rousseau, are for absolutely turning the car around and heading it the other way. These reformers seem to think that the farther we get from the paths of our fathers the surer we shall be of doing the right thing for their sons.

In discussing some changes in our scheme of education I wish to disclaim in advance any sympathy with the reformer who would destroy the present scheme of education simply because it is an old one. I have too much respect for the wisdom of others, and too little confidence in my own judgment, to be willing to take this responsibility.

Edmund Burke in his essay, "Reflections on the French Revolution," says:

Instead of casting away all our old prejudices, we cherish them because they are our old prejudices, and the longer they have lasted, and the more generally they have prevailed, the more we cherish them. We are afraid to put men to live and trade each on his own private stock of reason, because we suspect that this stock in each man is small, and that individuals would do better to avail themselves of the general bank and capital of nations and of ages. Many of our men of speculation, instead of exploding general prejudices, employ their sagacity to discover the latent wisdom which prevails in them. If they find what they seek, and they seldom fail, they think it more wise to continue the prejudice with the reason involved than to cast away the cost of prejudice and to leave nothing but the naked reason; because prejudice with its reason has a motive to give action to that reason and an affection which will give it permanence. Prejudice is of ready application in the emergency. It previously engages the mind in a steady course of wisdom and virtue, and does not leave the man hesitating in the moment of decision, skeptical, puzzled, and unresolved. Prejudice renders a man's virtue his habit, and not a series of disconnected acts. Through just prejudice his duty becomes a part of his nature.

As men of affairs, we should, while attempting to explode general prejudices, also, as Burke says, employ our sagacity in discovering the latent wisdom which prevails in them, which has given them their utility and permanence. We cannot afford to lose the advantage of a steady, continuous course of action. We must not hesitate in the moment of decision, "skeptical, puzzled, and unresolved." We must not propose changes merely for the sake of change—for the sake of a passion for new things. We must recognize the virtue there is in the old; must endeavor to discover the latent wisdom that is contained therein. In proposing changes we should hold fast to the old, while making such modifications as the changing interests of society demand.

I shall not attempt in the brief time given this paper to discuss the problem of universities—the problem of higher education. I shall confine my remarks to the work usually done in the elementary and secondary schools. I do this, first, because I regard these as the schools of the plain, common people; and

second, because my experience has been confined almost entirely to this class of school work. What I have to say on the subject of secondary and elementary education will be based upon some direct practical acquaintance with the problems of such education. My opinions on the subject of higher education will be of less interest to the public than those of educators who have been more directly concerned with the work of the college and the university, and whose experience will enable them to speak by the book. I shall assume that the schools are, at the present time, in a general way adjusted to the wants of society; that they conform to a large degree to its demands; that the school does put at the disposition of its pupils what has been accomplished in past ages; that the schools are attempting to give to their pupils an opportunity "to acquire the social heritage of truth and ideas resulting from the laborious investigations and profound meditations of all past ages."

I should certainly not wish to change this. My purpose would be to extend it. The schools of the past have not tried to extend these opportunities to all the children. The leisure-class theory of society has dominated the educational theories of the school. The privilege of acquiring the social heritage has been given to certain selected members of society who were planning to follow the professions. While we have talked glibly about giving every boy a chance to become president of the United States, everyone knows the chances of this happening are only one in several millions. These chances hardly justify keeping the training of all children along the lines that seem likely to profit the few. Such a theory of opportunity as this can hardly be called democratic. A fairer one must be substituted for it. A system of schools that permits an increase in the number of the exploiting class can hardly claim to be democratic, when we recall the percentage against the great mass ever realizing any advantages from it.

Lester Ward, of Brown University, in arguing for a really democratic system of society, says:

There is no use in talking about the equalization of wealth. All the discussion about equal rights is utterly hollow. All the ado made over the system of contract is surcharged with fallacy. There can be no equality and no justice, not to speak of equity, so long as society is composed of members equally endowed by nature, a few of whom only possess the social heritage of truth and ideas resulting from the laborious investigations and profound meditations of all past ages, while the great mass are shut out from the light that human achievement has shed upon the world.

The equalization of opportunity means the equalization of intelligence, and not until this is obtained is there any virtue or any hope in schemes for the equalization of the material resources of society.

There is not much hope for any permanent social reform so long as society consists of two classes—an intelligent or well-informed class, and an ignorant or uninformed class. There is too much truth in the dictum that intelligence will rule. Inequality of intelligence necessarily results in the cleavage of society into an exploiting and an exploited class. If there is no way of equalizing intelligence, social reforms in this direction seem out of the question.

Mr. Ward's contention is that the difference of intelligence of classes,

so called, as classes, is immense; but that it is not due to differences in intellect or natural powers, but is due to differences in education; that it is the result of the fact that the achievement of the race has never been transmitted to more than a small fraction of the race. Our educational problem, he urges, is to reorganize the schools and society so that the heritage of the past shall be offered to all. This will mean not merely the transmission of the ordinary academic knowledge offered as a preparation for certain select professions, but the offering of what the race has achieved in science, in art, and in the industries, so that each member of society shall be able to secure the nutriment best adapted to his growth and development. This will mean an organization of the schools that will offer to all, at such times and in such places as are most convenient, a schooling that will enable them to grapple most successfully with the problems of life.

I cannot refrain from adding still another quotation, which seems to me to characterize fairly the situation in the past. Professor Veblen, of Leland Stanford University, in his *Theory of the Leisure Class* says:

Our school systems should become really democratic in their aims, in their administration, in their spirit. If they become really democratic in their aims, they will not, as at present, aim at giving the children of the poor an opportunity to acquire an education that will fit some few brilliant, gifted children to become members of the class above, while neglecting the cultivation of the homely gifts of the classes of society as unworthy.

Present ideas of education have been based upon the notion that manual labor means weakness, subjugation, and inferiority. Education for the purpose of increasing efficiency in productive work has been regarded as unworthy of the free man. The leisure-class theory of education seems to be based on the notion that only non-industrial occupations were worthy, using "industrial" in the narrow sense.

The coercive utilization of man by man, rather than the utilization of nature, or, rather, man's non-human environment, was regarded as a worthy aim, and training that would develop him for war or for the professions was regarded as a worthy ideal. The training of the muscles that would prepare for exercise in war was regarded as the proper thing; while the training of the same muscles in some useful trade was looked upon as degrading and lacking in cultural value.

The same general principles develop in the selection of studies for training the intellect. The training of the moral nature incidental to these views was inevitable.

These statements, while they do not describe every system of schools, seem to me to characterize fairly well the present situation. Much has been done, and is being done, to modify the situation described by Mr. Veblen. We are ceasing to regard industrial occupations as degrading, and the popularity of the industrial sides of our elementary and secondary school work is proverbial.

Dr. Dewey says:

We are beginning to recognize the change in our social situation that overshadows and even controls all others—the industrial one—the application of science, resulting in the great inventions that have utilized the forces of nature on a vast and inexpensive scale; the growth of the world-wide market as the object of production; the vast manufacturing centers to supply the market; the cheap and rapid means of communication and distribution between all its parts. The face of the earth is making over, even as to its physical form. Political boundaries are wiped out and moved about as if they were indeed only

lines on a paper map. Population is hurriedly gathered into cities from the ends of the earth. Habits of living are altered with startling abruptness and thoroughness. The search for the truths of nature is infinitely stimulated and facilitated, and their application to life made not only practicable but commercially necessary. Even our moral and religious ideas and interests—the most conservative because the most deep-lying things in our nature—are profoundly affected. That this revolution should not affect education in other than the formal and superficial fashion is inconceivable.

These industrial changes have already made a profound impression upon our educational thought. Technical and industrial schools of a college grade are numerous. Manual-training high schools are common. Manual-training work in the grades is almost universal. We are endeavoring to supplement the three R's with the three H's, and already one can perceive a fundamental change of attitude on the part of the public toward the problem of the schools. We recognize that the three R's are only practical because they can be turned to use. We feel the necessity for the cultivation of the hand because of its direct practical utility in meeting the problems of daily life. We regard it as a mistake to think of the work of the school as a matter of teaching the child only the ordinary academic subjects. We are endeavoring to take into account the work of the home and its relation to the work of the school in making available the results of the culture of the race. The modern schoolmaster must provide physical training and manual training, as well as training in the three R's.

At the present time the schools are compelled to undertake a large amount of training for life that was formerly done in the home. The growth of our great cities has rendered impossible the kind of training given to every child in the old-fashioned New England home. The child must learn to use his hands in the school of today. In the school he must acquire habits of industry, self-reliance, and efficiency. The modern home can face no such responsibilities.

In the schools of the twentieth century I believe we shall continue to offer the child eight years of general education, not perhaps along the identical lines now followed, but carried on under the ideals of broad general preparation for living—not for specifically making a living. In other words, I do not believe that we shall inflict a trade upon a child during the time of his attendance at the elementary school. We shall not decide for the child the life work in which he will be most efficient and most happy. The common community school, as the Germans call it, will occupy itself with problems of general culture, general education, general transmission of the culture of the race, and general training to develop the power to utilize the material at the disposal of the race. This means careful training of the whole boy. This means the development of the power to use the printed page; the development of the power to use the simplest elements of mathematics; the development of the power to use the hand in connection with the use of the brain. It will mean instruction in the simplest facts of nature-study, history, geography, and literature. No child should be robbed of an opportunity to acquire this power

and this culture by an over-anxiety to fit him for some particular groove in which he is to move for the rest of his life. On the other hand, when the time comes at which the ordinary boy or girl must decide the question of either preparing for the high school and college and a profession, or of engaging in some commercial or industrial work, when he so decides the school authorities should give him every assistance in their power, and should give the boy who chooses commerce and the industries as much, and as efficient, assistance as they do to the boy who remains and fits for the college and professions. The school authorities should give him an opportunity to secure a training that will make better carpenters, tailors, and clerks, as well as better members of the professions.

Such schools must be carried on at such times, and in such places, as will meet the convenience of the children. We shall need to add to the ordinary high school of today the workingman's high school, or continuation high school. We should organize these continuation schools with special reference to the needs of the class of young people who are compelled to enter on their life work at fourteen, furnishing them from eight to ten hours of instruction per week as will be of service to them in earning a living—instruction and training that will make them less the slaves of the machine to which they naturally become attached when they enter a shop. The instruction given in these schools must be in closest relation to the work of the shop. Such schools will continue to give practical training in the use of the mother tongue, practical training in mathematics, practical training in drawing—which is regarded by the Germans as the grammar of the industries—as well as training in hygiene and the elements of civics. Such schools will consider the problem of making citizens as well as mechanics.

These continuation schools may be run in the evening, to meet the conditions of the stronger and more energetic young people who are employed during the daytime. The experience of Europe, however, has shown that only the stronger and more energetic young people can profitably use the evening continuation schools. Work done in the evenings is done under trying conditions, and these schools are usually run only during a small portion of the year.

As ordinarily carried on in our country, under the name of evening schools, their funds are curtailed whenever the money is lacking. For some reason, we have seemed to believe that the young people who are compelled to attend these workingman's high schools have not the same claim upon the school system as those who are able to remain and attend the day high school for the full four years. We seem to be ready to care for the fortunate youth who is able to remain in school until he is eighteen years of age, giving him instruction that will fit him for the professions, with all the advantages of our splendid high-school equipment. We seem to grudge the poor boy, who is compelled to go to work, the opportunity to attend an evening school for more than four or five months. There is little justice in this. Such schools should be run

the year around, and should give as good opportunities to the young people who wish to attend them as are given to the day-school pupils in our high schools.

Even this, however, will not do justice. As was stated before, the experience of other countries has shown that the evening continuation school cannot entirely do the work. The boy who has put in eight or ten hours in the shop or store is not in a physical condition to do school work in the evening. Only the stronger and more energetic will go on. We must maintain voluntary schools, open in the evening, for young people to attend. We must, however, rely mainly upon day schools of the same sort which will offer opportunities for eight or ten hours per week for young people between the ages of fourteen and eighteen. This work should be made compulsory, and the responsibility for attendance should be placed not only upon the youth himself, but upon the parent and employer. Such regulations are not a matter of theory, but rather of fact, in the larger part of Germany and some parts of France and England. It has seemed clear to the men who have been in closest touch with the work that the day continuation school must become a large factor in the problem of educating the youth of our land.

Few realize the force of the argument for this enlargement of our school opportunities. In a speech before the Society for the Promotion of Industrial Education, at Atlanta, Congressman Davis, of Minnesota, made the following statement:

There are eighty-two million people in the United States. Thirty-two million of these are breadwinners. Of these thirty-two million, one million are merchants, heads of business, etc. One million are professional men. Thirty million of the thirty-two million are bread-winners whose work is mainly with their hands.

The thirty million are the people about whom we should be most concerned.

Changing the illustration a little: In 1900, seven out of every eight children did not continue in school after their fifteenth birthday. This means that 87 per cent. were going forth into their life work with very scanty schooling, without any opportunity to participate in the culture of the race. This means that the typical American child of the day has only received the training offered by the first six or seven grades of our public schools. The greatest need of the day is an opportunity for our youth to continue this training up to the age of eighteen. The greatest educational need today is so to organize the schools that they will continue the training of the young worker who is compelled to leave school, for any reason whatever, at the age of fourteen, until early manhood. Such schools will be truly the high schools of the workman, and the only high schools that will ever be available to him.

It will be necessary in some cases to establish independent schools to carry on this continuation work. The experience of Germany has shown that every city should be supplied with a number of thoroly equipped schools which shall devote their entire energies to the training of the youth who have entered upon commerce and the industries. It will be necessary to supply these

schools with specially trained teachers—teachers who are thoroly trained on the technical side and who have received, in addition, careful preparation for the work of teaching. These schools must be as well built and as thoroly equipped as any other kind of school, but must introduce more of the shop element than is desirable or possible in ordinary schools.

While these independent schools should be maintained and managed by practical and trained supervising officers and teachers, it may not be desirable to separate them entirely from the ordinary schools. In some cities in Europe the continuation work is carried on in the same building that is devoted during other portions of the day to the instruction of the ordinary pupil. It is thought that some of these continuation pupils, in direct touch with the teachers and pupils engaged in ordinary school work, will be enabled, thru some fortunate turn in their situation, to re-enter the ordinary school work and finish the ordinary course of instruction.

There seems to be some difference of opinion among educators as to the maintenance of the independent industrial schools. This difference of opinion is also prevalent in America. The majority of educators have seemed to believe that the two sorts of work should be carried on together. The practical difficulties in the way, however, seem to me to be almost insuperable. Experience in many cities has shown that it is extremely difficult to carry on, in the same building, under the same general supervision, parallel courses so entirely different in character, without one or the other suffering. On the whole, I should favor the maintenance of a number of independent schools, leaving the problem of determining how far such schools shall be independent to be settled after years of experience.

It is evident that I have not touched upon a large number of subjects engrossing the attention of educators at the present time. I have intentionally left out the discussion of a large number of incidental questions, hoping to concentrate the discussion upon what I regard as the fundamental feature of the changes demanded by present conditions—that is, a fuller recognition of the demand upon our school system for instruction and training that will fit for commerce and the industries. I shall not be surprised if I am criticized severely for the narrowness of the scope taken by my paper. I hope, however, that what has been said will serve to emphasize the necessity of recognizing a fundamental change in the conditions facing us in the present century.

DISCUSSION

JAMES A. MACLEAN, president of the University of Idaho, Moscow, Idaho.—Nineteenth-century education dealt with the adjustment of the school to the individual pupil and with the adjustment of the different parts of the school system to one another. Twentieth-century education will deal with the education of the individual as a future member of various social, economic, and political groups and the adjustment of the school to its environment.

The individualistic tendencies of the nineteenth-century education have been emphasized by an educational science based chiefly on psychology. The twentieth-century

education will require the socialization of educational theory and the addition of educational sociology to pedagogics.

In the twentieth century the uniformity of curriculum that is required by the national and state environment may still be preserved, but a variable element will be introduced for the adjustment of the school to its communal environment. The point of view suggested here may be found helpful in relation to the following educational problems:

1. The present education toward citizenship is utterly inadequate for the solution of the political and economic questions that a complex civilization brings. The adjustment of the school to the national environment will result in the improvement and extension of educational activities for the promotion of a better citizenship.

2. There is now no systematic instruction in standards of conduct in the ordinary relations of life. The adjustment of the school to its social environment should include the instruction in practical ethics required by twentieth-century civilization.

3. The rural school is a case of failure in adaptation to environment.

4. The standard high school is a case of partial failure in adjustment to environment.

The economic changes that mark the last fifty years are almost revolutionary in character. The distribution of the population according to occupation and according to residence in city or country is completely changed; the distribution of the social income is greatly changed; and the distribution of family budgets of expenditure is changed. For the pupil, life's whole outlook has been altered. In the end all social institutions, including the school, must depend on the underlying economic organization. The system of local self-government in matters educational permits the adaptation of the school to its environment, and the responsibility of socializing the school rests entirely with the schoolmen.

J. STANLEY BROWN, principal of Township High School, Joliet, Ill.—The mere statement of this question is an acknowledgment that the school curricula must keep pace with the changes brought about by the complexity of our national life. We have abundant evidence that there are legitimate demands which at present have to be satisfied by certain type forms of education not found in the present public-school system; and it seems to us that, if the public-school system is to do its greatest service, we must take cognizance of the work which these other institutions are doing, and ask ourselves the question: How can we meet these newer demands which are now being met in many cases by institutions run for revenue only, and not privately endowed institutions?

The fact that the International School of Correspondence, the American School of Correspondence, and other similar institutions are adding to their enrollment many thousands of students, largely from the laboring population, who are beyond the legal school age, is to me of broad significance. The vacation school is not enough; the evening school with its present development is not enough. We must have something more distinctly akin to the courses of study offered by the types of institutions I have mentioned, and this work must be done thru the public-school system. It seems unjust, it certainly is unfortunate, that these thousands of young men and young women, older men and older women, who have been thrust into the wage-earning class before they had opportunity to get the training which they evidently wanted, should now, after they have passed the legal age, find it necessary to pay extravagant amounts of money for tuition in order to secure the training necessary to put them in line for promotion in the kind of work which their experience has shown them to be naturally adapted to do.

Every great manufacturing center in smaller city and large must very soon make provision at public expense for the men or women, whose training is to them insufficient, to get a broader training at such times during the day or evening as shall be possible for them with little or no interference with their present employment. This action would, in my judgment, be one of the primary adjustments of our school system to meet the changed conditions of the twentieth century.

In general, we find two opinions on questions of this sort: One says, "Give the people

what they want;" the other says, "Lead the people to want what they ought to have." The former is cheap, temporizing, unsatisfactory; the latter is defensible, sane, and its own defense. In order to accomplish the latter all the best elements of society must be united, and when so united, every new demand made upon the public-school system will mean that it will be met because it has come not from the lower stratum of society, not from the higher stratum of society, but from a combined resultant of the two working together for common good.

ARTHUR H. CHAMBERLAIN, dean of Throop Polytechnic Institute, Pasadena, Cal.—Greater changes have taken place in the economic and industrial development of the country in the past ten years than in any other like period in the history of the world. In theory the school system has changed so as to meet these conditions, in part at least. In point of fact there is no one of our human institutions but has undergone a greater and more far-reaching change than has the school. It is true that certain schools have struck an entirely "new gait," and in any system of schools there are to be found men and women who are putting into practice ideas that a few years ago would have been radical and would have branded these teachers as heretics. For the most part, however, and among the rank and file the country over, the practices of today are quite similar to those in vogue in the times of our fathers. Even where methods and ideals differ from those of the past, they are quite as far from squaring with the present-day needs as was the case formerly. Indeed it is almost safe to say that notwithstanding the fact that the present-day school is far in advance of what it was fifty or one hundred years ago, still, in many ways, the school of today does not meet the needs of today as fully as did the school of past time meet the needs of its own day and generation.

The life of the home has undergone a great change. It has been warped and twisted, and too often, especially in the cities, the home has been displaced by the place of abode simply. Our methods of communication, of transportation, of supplying our daily wants, of homekeeping, are so unlike those in force a few short years ago as to be hardly recognizable as steps in a mighty evolution. Even the church militant, regardless of sect or denomination, is a new church. In all walks of life and in all ways we find this last century a new century. And the school, which should, in fact, blaze the trail, will, if it fails to take stock, to mark down shopworn goods, and fill its shelves with new and up-to-date materials, find itself in the position of a camp follower instead of the standard bearer.

What must the school do to meet these changed conditions?

First: the school must set a higher moral standard than it has done in the past, since neither the home nor the church offers sufficient opportunity for moral instruction, even among those who have real homes or who attend church. We are coming to recognize that education which does not consider, both in theory and practice, moral instruction as the chief end of school training, is only partial and a farce.

Second: each grade or year of school work must aim to round itself out; it must not simply prepare for another grade or year of school, which the boy or girl may or may not enter. The year at school which is of account mainly as it prepares for the next year above should no longer be tolerated. Conditions must be studied. The aim and abilities of the individual and his environment are to be considered. Conditions must be such that whenever the student is forced to discontinue his school work, he may find his schooling a *usable* quantity. All schools should be preparatory schools—preparatory to the life of today and tomorrow, rather than preparatory to another school, as superficial as the one below it.

Third: because manual training is essential and because the schools must meet present conditions, we must, in a rational way, industrialize the curriculum. Most of our so-called industrial education is no industrial education at all. Manual training schools are, for the most part, meeting the conditions little better than did the well-regulated Latin schools; and the manual training offered in the grades is "tacked on" to the curriculum rather than being an intrinsic part of it. The industrial side of schools is yet to be developed, and the

industrial and commercial development of the country demands a real industrial school. A curriculum made up piecemeal of subjects fastened to it is similar to a farm wagon held together with bits of rope and leather and bailing wire. The only safe way is to build from the foundation.

All of this points to the necessity for a clearer conception of the meaning of education on the part of school people generally, better-trained teachers, increased salaries, less politics among schoolmen, a closer touch of the latter with the affairs of actual life, and a higher moral standard thruout the profession.

J. W. CRABTREE, president of State Normal School, Peru, Neb.—I indorse every word of Mr. Cooley's paper. I want to lay emphasis on only one point growing out of his discussion. That which will facilitate the adjustment of our school system to present-day demands more than any other one thing is to loosen the grip of university, college, and normal-school committees on high-school affairs. Public-school men are greatly hampered not by accreditation, but by the license that college committees often take as a result of accreditation—that of making courses of study for high schools and that of dictating methods and devices to be employed in teaching high-school subjects.

It seems to be assumed that the members of college faculties are broader-minded, better-balanced men, that is, that they are men more capable of deciding questions pertaining to the nature and scope of school work. But is it not true that the college professor has very often stepped direct from graduate student into the faculty, a life-tenure position which he can hold whether he possesses exceptional ability or not? Is it not also true that the public-school men in the best places have gone thru a refining process, having had their abilities tested and passed upon at every one of a series of promotions, and that the weaker men have been weeded out all the way along the line? Is it not true that this refining process of the public schools places a class of men of rare attainment and extraordinary ability in charge of these schools, and is it not a further fact that college faculties could be greatly improved by filling vacancies with scholarly men and women who have passed thru some such refining process as that of the public schools? Then again, is it not true that the work of these schoolmen puts them into very close touch with the home and the community, enabling them to see school interests in their interrelation with all other interests?

Our school system as we are building it is a shaft growing higher and more imposing every decade. It is composed of four sections: (1) the foundational, representing the four years' kindergarten and primary work; (2) the next section above representing the four years' intermediate and grammar-grade work; (3) the lower of the upper half representing the four-year high school; and (4) the upper section representing the four-year university, college, and normal-school work.

This shaft is said to resemble at the present time the leaning tower of Pisa, in that the sections are placed on each other in such a way as to place the center of gravity almost directly over the edge of the wide base.

If a perpendicular is erected at the middle point of the base it will be observed that the uppermost section lies wholly outside of it; in other words, it will be seen that the university, college, and normal-school division is farthest out of line. Instead of shifting their section and placing it squarely in the center, with the high school as a foundation, many professors insist on trying to slide the high school over still farther out of plumb.

Some of these men act on the theory that this great shaft is attached some way or other at the apex to the heavens, that their section carries the weight of the entire shaft, and that to loosen their hold on the high school means that the rest of the structure will fall to the earth and be broken into pieces.

But, gentlemen, this shaft of the public schools, as emphasized in Mr. Cooley's paper, rests on a solid foundation. The university, college, or normal-school professor can loosen

his grip on the high school without the slightest danger of the rest of the structure's falling to the earth and being broken into pieces.

In conclusion, permit me to summarize as follows:

1. The problems of the high school must be solved mainly by those actually engaged in that phase of educational work.
2. In revising courses of study, public-school men should not be hampered by any set of entrance requirements or by any set of rules of accreditation arbitrarily made out by college committees.
3. The uplifting inspirational influence of the college on the high school does not come from overbearing and arbitrary control.
4. The one thought to be held in mind, whether shaping a course of study for primary grades, high school, or college, is that the basic purpose of the school is not to further the interests of any institution or any man, but it is to promote the welfare of youth and to enhance his chances of being a useful member of society.
5. It is much easier and very much more pedagogical for the college to build its courses on the foundation laid in the high school than to make arbitrary courses and require high schools to prepare for them.
6. That which will facilitate the adjustment of our school system to present-day demands more than any other one thing is to free the high school from the dictation of committees of the higher institutions, which condition has come upon the school system as an unwelcome and an unnecessary result of a wise system of accreditation.

Z. X. SYNDER, president of State Normal School, Greeley, Colo.—The adjustment of our school system to the changed conditions of the twentieth century is the main proposition. The particular phase of the subject assigned to me is, "Are the Public Schools Adjusting Themselves to the Changed Conditions?" The first inquiry is, What are the changed conditions that are found operating in twentieth-century civilization that have grown out of the nineteenth century? (1) Division of labor in all industry, trade, commerce, etc.; (2) specialization in every line of human endeavor; (3) intense competition and rivalry in all activities; (4) skilled workmen demanded all along the line in the narrowest lines of effort; (5) the supremacy of the scientific method in our lifetime; (6) the elimination of the apprenticeship system by various causes, preventing people from having the opportunity to develop and become productive along lines particularly adapted to them; (7) national supremacy depends quite largely on industry, trade, and commerce; (8) the use of machinery in the manufacture of most of the articles used in life; (9) the necessity of becoming a producer earlier in life, growing out of the value of time; (10) the demand in life for more comforts and the gradual change continually of comforts into necessities; (11) while the complexity of life requires division of labor and specialization, yet the general understanding takes a wider range: (12) just as the collective life expands, the individual life necessarily must, and *vice versa*.

The second inquiry is, Should our public-school system adjust itself to these changed conditions? (1) Here I think and believe with LaBon in his *Psychology of Peoples* that the institutional life of a people grows out of the soul of that people—out of their civilization; and that the best expression of the individual is found in his collective life—in the institutional life of that people—in his home, in his civic relation, and in the arts, sciences, and industries of his time and civilization; (2) general feeling of something wrong.

The third inquiry is, Has our public-school system adjusted itself to these changed conditions?

I think it will not be successfully questioned if we say it has not adjusted itself to the conditions. The obstacles in the way seem to be: (1) the static condition of prejudices; (2) the adherence to the fallacy of the dogma of formal discipline; (3) the adherence to and worship of the antiquated Platonic or classic conception and practice of culture.

The fourth inquiry is, how to adjust our public-school system to twentieth-century

conditions. (1) Free the system and the minds of the people from the classic conception of culture and the belief in its efficacy in the intellectual salvation and social standing of a man or woman; (2) free the system from a mechanism whereby the educational unit above dominates the unit below; (3) Have the system sufficiently elastic at *any* point to give the individual an opportunity to express himself along the lines of his power, his bent, and his industrial and economic relations to his family, community, and country; (4) be interested as much in having the great mass live better and be more efficient in life, as we are interested in the few that we push up to the high school and college; (5) construct and adjust the system along the lines of health, industries, manners and morals, and patriotism; (6) introduce vocational and trade schools into the public-school system all along the line.

THE ADMINISTRATION OF PUBLIC-SCHOOL SYSTEMS

I. THE PROVINCE OF THE COMMON PEOPLE IN THE ADMINISTRATION OF PUBLIC EDUCATION

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The province of the state.—In the United States of America the policy, organization, management, and support of elementary and secondary education is assigned to the several states, it being assumed that the national government has neither relation to, interest in, nor authority over the same. It is true that the national government has made large grants of lands to many of the states to encourage and develop public education, but it has never been assumed that there was any responsibility on the part of the state regarding the expending, the preserving, or the employing properly of such munificent endowment, it being supposed that it was the business of the people of the state to demand an accounting of their officers for their stewardship. As a consequence of this policy, every individual state has originated and developed its own system of schools in accordance as its people have seen best, much of the initiative being conferred upon the people of each local community and much of the success of the enterprise depending solely upon their enthusiasm, faith, and liberality, as well as their comprehension of the problems involved. In fact, before the state systems had found their way into constitutions, laws, and administrative management, schools founded and supported by the citizens of the more progressive local communities were in existence. The state systems, when established, were given control of certain functions in order to co-operate in assisting the local communities to conduct the work thus inaugurated to better advantage, rather than to assume the conduct of the schools that existed, or to claim the right to dictate their policies, their spirit, or their standards. It is thus truly determined that the American citizens of every original colony and the founders of every new territory and state have, on their own accord and from their own conception of civic needs and of economic aims, provided in a public way for the education of the children of the common people of every local enterprising community.

Who originated public schools?—This fact thoroly understood develops the further fact that free, universal education of the masses was not the origination of some philanthropist who sought to enlarge the welfare of the common people; nor of some far-seeing publicist who realized the great result to the people as a whole that would come from the establishing of the common school for the specific benefit of the state as an organized plan of government; nor of some religionist who deemed this plan of public work to be the way to insure public morals and higher standards of living; nor of some scholarly teacher who felt the impulse to use his knowledge for the benefit of others and at the same time secure personal support thru the business for himself and family; nor of some generous-hearted statesman who sought protection for patriotism and liberty thru the spread of intelligence and thru training the young by the means of a universal system of education that would guarantee the future; nor of some remarkable man of affairs who had a vision of the wealth and the progress of the centuries to come, and thus sought to conserve the economic and business capability of the future citizens of the enlarging nation. The most wonderful of all is the fact that this great plan evolved gradually and continuously from the thought, the study, and the experience of the people themselves. Thus it was that Massachusetts received the idea of free public education from the immediate need of those who found it necessary to rely upon their own resources and ingenuity when they settled in the wilderness. In similar ways did popular education have a beginning in New Amsterdam, Pennsylvania, New Jersey, Maryland, and other colonies, each working out the problem for itself with little if any knowledge of the plans, undertakings, or purposes of neighboring colonies. In every case, the local community was the initiator of the new civilization, and the success, prosperity, and enlargement that followed in every one of these state school systems has continuously and chiefly depended for more success and for more definite improvement upon local energy, local enterprise, local pride, local standards and ideals for all real progress and development.

The result of development.—The American plan of education is a development from the simple to the complex—progress, expansion, and opportunity depending almost entirely upon the popular conception of the true value of liberal education, the importance of scholarship, and an investigating mind to the enlargement of every individual's chance for power and place. Out of these conceptions of individual benefits have come the broader conceptions of public needs which, being accepted and adopted as a sensible public policy, established the primary and elementary schools, then the classical high schools, and lastly the technical high schools. The popularity of each of these movements can hardly be fully realized even by the most careful and thoughtful investigator because they are the fundamental applications of democratic initiative and of common conclusions concerning the actual needs of the masses. Where general legislation has occurred it came in answer to public demand that it might give permanency to ripe conclusions, thus making per-

missive to all communities a public work at public expense that had been found by experiment to be important for the benefit of all, thru the success of the few. This permissive legislation has brought great development, since by a gradual evolution new undertakings became a necessity, new tests were commended to those less progressive or less inventive and finally the practice of special endeavors became so nearly universal that they were transferred to statutes and to constitutions. In this movement, democracy has worked out deliberately and completely its own salvation to the surprise of all who do not regard the mass of men as capable of self-government. It has accomplished a work among the people of the whole country that surpasses any other system that could have been devised by experts, or originated by officials who were selected by the state to organize and conduct matters without regard to the acceptance or the comprehension of its plan as a whole by the common people. The capability and the confidence of the popular will of the masses have been fully shown in the building of schoolhouses, in the voting of large tax levies for the support of the schools, in the election of school boards that are fully prepared to represent the interests and the welfare of the people, and in the co-operation and sympathy shown with teachers and superintendents who conduct the work with authority and consent. All these things are evidences of a progress that means more than the education of the pupils of the schools alone, or of the training of the teachers in public service, or of the development of school boards, since the vast majority of the people themselves have, thru this system, obtained valuable and healthy opinions about public education, have acquired settled views that are sane and reliable about the curriculum to be taught, the proper kind of teaching and the discipline to expect of a school. The people have acquired thereby a training in political leadership and in initiative that is the most marvelous outcome of the application of democratic principles of government among men. The reality of these things cannot be appreciated by one who is not in touch with the masses and who, thru aristocratic notions or solitary development and training, does not know that the common people are entirely competent to manage such great affairs properly and intelligently, if they are given an opportunity to develop their powers and capabilities as citizens in the great school of experience.

Importance of democratization.—Wherever public education has made the most real progress in the United States there democratization has been the most completely employed, since real progress is to be judged by the effect upon the masses and not by the reports of experts upon the reaching of technical or school standards. Wherever the policy has prevailed that the conducting of public schools requires that the people rule, and demands therefore that the people must know the truth about educational work, and that the leaders must help the people to the opportunity to be educationally intelligent, there an ideal condition approximately exists, and there the prospects for the future are on the largest scale and the factors of accomplishment possess the greatest

promise. Wherever the endeavor is undertaken to make the people a large factor in all things possible to be conferred upon them, from co-operation in the home with the teachers to control thru a popular election of the policies of developments to be carried out, there popular education is based upon a reality, and the chance for a proper appreciation of the importance and character of education for the children is absolutely established. Take the American community where the patrons of the schools have very little authority that they can exercise, where they are passive recipients of state or national beneficence, where teachers and financial support are not dependent upon public appreciation and favor and majority indorsement, where the course of study is too holy a thing to be submitted to public consideration and rectification, where the management is supreme in its own way and depends solely on its own opinions and judgment, and there will be found to exist a school system that degenerates into a mechanism developing decided conditions that naturally and properly produce dissatisfaction, growing distrust, and a consequent abandonment of appreciation and sympathy. Take the American school where the people's voice is not heard in local educational affairs; where the people's opinions as to their needs are not determined by themselves; where rules, regulations, and laws are the work of experts; where commissioners are assumed to be the best makers of policies and the dictators of plans; where the people are assumed not to know enough to have a prominent part in their own affairs, and there can be found tendencies developing that will eventually require a monarchical form of government to control the acts of the patrons of the schools in order to compel their children to remain in school and secure the minimum educational qualifications that are assumed to be essential to citizenship.

Centralization of power.—In the last three decades notable changes have occurred in many of the states whereby the consolidation of authority has been made and its use conferred upon officials removed from the people. These movements have been so gradual that they are scarcely perceptible from year to year; but a study of a period of years will establish the fact that people are continually losing and the experts are continually gaining. There are numerous types of these modifications but for practical purposes but two of the more prominent are mentioned here:

1. There is a constant enlargement of the authority and discretion of state educational officials. They are given functions and powers that relieve the service of the people and their immediate appointees, the school boards. This is done either by expanding the services and duties of state boards or of state superintendents. In every case it means the loss of power and influence of those directly associated with the work and the magnifying of the influence and dictation of the expert and the professional educator. The farther removed such officials are from the reach of the common people, the more they are indifferent to the claims of democratic leadership and the less they care for the co-operation and the sympathy of the masses. The

natural result of such a policy has been the increase of arbitrary standards of determining results, and a loss of popular enthusiasm and universal intelligence concerning educational endeavors. As a matter of course, there is reasonable response in the beginning to the requirements of the new order of affairs, giving these experts and dictators much to show in statistical results; but it should be remembered that their dependence at present is upon a people that have been trained for public service and that the new method will not train the coming generation to any equivalent degree. The education and the training of a free and a reliant people depend upon their having an opportunity to test and use their capabilities to the fullest extent. Arbitrary standards are not substitutes for a genuine living interest; passive submission is not equivalent to experienced action; ready acceptance of the plans of authority without thoro investigation is not a thoughtful, valuable method of procedure. Wherever expert control prevails, highly organized systems are possible because formalism takes the place of popular spirit, regulations and restrictions are substituted for cordial co-operative endeavor, examinations and records are regarded as evidences of progress and improvement, rather than the realities of the attainment of self-control, individual responsibility, and personal enthusiasm among the pupils. Having nothing to be responsible for ruins the efficiency of a democracy, because the mere fact of classifying the people as incompetent to act lessens the capability already possessed, and the transfer of responsibility from those originally possessing it destroys even their chance for development and improvement.

2. There is a growing tendency to accept the domination of college influence in the conduct of public-school activities on the notion that these managers of higher education are particularly well qualified to decide correctly the problems involved. This dictation aims in a friendly and persuasive way to decide the formulation of the courses of study, the number and variety of teachers that are needed, the special kind of scholastic and training qualifications the teachers should possess, the equipment and accommodations that should be furnished, the number of months and years that work should be maintained in each branch in the course of study in order that the graduates of these public schools may be received by these colleges on the face of the statements made by their principals. For all this conceding of supremacy to the college point of view, these public schools are granted the honor of being printed on the accredited list and of publishing to the world the distinction thus conferred. While, in fact, this assumed authority is more implied than real, yet it has had the effect of largely granting what is demanded, as ambitious teachers and school boards enjoy the compliments thus bestowed and are proud of the honorable mention that is thus obtained. By these combinations of colleges into associations and these separate associations being united into still higher associations, an educational trust has been formed that controls more men of influence, more work of the public, and more capital of the people than any other business combination has been able to bring to pass. Out of

this plan of co-operation has grown up the system of standards and of quantitative measurement of everything educational, so that quality is almost entirely ignored and differences in personal capability and accomplishment are not regarded. It is true that quantitative standards are easy to determine, compared to qualitative standards, yet it seems regrettable that an education is measured by years, by exercises, by pages in a laboratory book, and by so many lectures, quizzes, and examinations. Quantitative ideals determine the fitness of teachers by the degrees they have obtained; they decide courses of study by the attainment of so many points; they define diplomas by units, and they designate scholarship by time spent rather than by degree of qualifications shown.

This whole procedure is based upon the fallacy that the chief business of educational work is to prepare pupils to undertake higher educational work, that the high school is maintained to fit its pupils to enter college, and that the function of the public school is always that of getting boys and girls ready, not for life, but for higher education. At the same time it is true that the mass of pupils that are in these high schools are never to enter college, and their own personal capability and future prospects are such that such an undertaking would be against their best interests. Altho most of them will, and rightly should, turn their attention to the industries, yet the teachers in charge, because of the training they have had and because of the ideals they possess thru their education, are in complete sympathy with college notions of what constitutes the most successful life, and are entirely opposed to the careers that the most of their pupils are destined to follow. In the eagerness to get credit for sending boys and girls to college, it is too commonly forgotten that the masses of those being taught are destined for careers that should receive much different attention than the preparation for the standard college requires. It has been too long accepted that preparation for college and preparation for life are one and the same thing.

The need for a preparation more practical.—Just such influences as these are against the best interests of the masses, since the people demand a more practical education than is now given and they are not mistaken as to the reality of their need. The claim that the schools are conducted simply to give discipline of mind and preparation for more advanced speculative study, rather than to give training for industrial and business careers, is not acceptable at this time. The masses realize the need for the boys and girls to learn how to make an honest living for themselves and their future families, and they are not impressed by results that are not real and productive. They are not willing to spend time, money, or energy in following a leadership that concludes that the common people do not know what they need and are not deserving to have their real needs recognized. Civilization depends upon both the scholar and the worker for its magnificence; but while it might get along without the scholar, it can never continue without the worker. For that reason elementary and secondary education should be conducted for

the many rather than the few, and the spirit and function of higher learning is not necessarily the spirit and the function of public education for the masses.

The hope of America depends upon the intelligence, the capability, the practicability, and the power of the individual men that combine to make up the body politic. It is such as these that register the majorities on election day; that decree the degrees of prosperity of our great industrial enterprises; that determine the success of our national existence by the power of democracy; that decide the destiny of liberty and independence. It is in our great cities that national dangers are said to lurk and that the conditions threaten the foundations of society; and yet right here educational management is monarchical, republican principles are not tested, the popular will is unknown, and the value and importance of free institutions are unrealized. It is true that public prosperity in American institutions depends upon the popular election, that the use of the franchise is necessary to good, reliable citizenship, and that without it the populace are not being trained for American responsibility or opportunity. Any other method is un-American in that it recognizes the classes and overlooks the masses. It is for these reasons that the power of the people needs to be kept up to the maximum, that the conducting of popular education should be their direct interest and they should be constantly trained to choose wisely and well. It is for these reasons that the dictator and the expert should not be developed on this soil at the expense and the judgment of the common man. It is for these reasons that the education of the masses in and out of school is the most important service to accomplish, since only by that means are they able to be effective in protecting liberty, spreading intelligence, and preserving righteousness. On such conditions being realized depend not alone public success but also public happiness. On such principles being accepted and enforced by the leaders of our people in the attempted enfranchisement of the common people from superstition and ignorance depend the perpetuity of free institutions and the greatness of national life.

DISCUSSION

WILLIAM SENECA SUTTON, dean of the Department of Education, the University of Texas, Austin, Tex.—President Seerley is to be congratulated upon his vigorous defense of the fundamental doctrine that the freedom of the individual and the freedom of the local community should be kept sacred by a people living under a democratic form of government. The grounds for his contention were succinctly stated some years ago by our ambassador to Great Britain during the Cleveland administration. In an address delivered before the Edinburgh Philosophical Society that minister declared that "the freedom of its individual members is the essential basis of the freedom of the state;" and that "the individual freedom of man's mind and soul is the instrument by which the world, under the very laws of its origin and progress, has been raised from brutality and barbarism to its present state of civilization." From a psychological standpoint the principle might be stated thus: Self-activity is the universal, fundamental law of human progress. Perhaps the greatest objection that can be advanced against the theory of government, as outlined in Plato's *Republic*, is that he forgot this all-important principle which requires self-activity on the part of the individual units composing the larger civil unit known as the state, and

intrusted the entire management of affairs to philosopher-rulers—the aristocratic few who had reached the stage of insight into pure being.

I am delighted at the evidence President Seerley has given of his rock-ribbed faith in democracy, for nothing is likely to bring more joy to the heart of a Texan than to meet a democrat from Iowa. Speaking seriously, I believe that the members of this Council are sufficiently in sympathy with the overruling tendency of modern life to agree cordially with President Seerley in his protest against enfeebling the spirit of personal and local development; for, if history teaches us any lesson at all, it is that all forms of aristocracy, being inimical to the distinctly human element, reason, should not be tolerated in the organization and administration of modern systems of education. A less polite way of stating the same truth could be framed in these words: "The man who favors aristocracy, like the man who says there is no God, is a fool," for his policy does not rest upon a rational basis. The idea that man resists subjection to continuous external regulation was in the mind of the wag who remarked that the Puritan's idea of hell is that it is a place where everybody attends to his own business.

While the principle of personal liberty is thoroly sound, yet there are limits to its application. Individual liberty does not imply that one is to exercise it unrestrained or that he is to enjoy, as it were, the freedom of the wild ass of the desert. Liberty is not absolute independence; but it is a right to be manifested in conformity with rational law, civil and social. The individual is under bond to consider his obligations to the social groups with which he is identified, as are those groups to leave inviolate the sacredness of his own individuality. Likewise, the idea of local self-government may become so strongly emphasized as to destroy the bonds of the larger social units which are necessary to the protection and the development of the local unit itself. Certainly, in the organization of the school system in any state of the American Union, a canon concerning which there can be no question is that the system is to be a state system; for surely the state, that is to say, all the people co-operating with one another, is responsible for the organization and maintenance of the elementary, as well as of the secondary and the higher, schools. The school in any local district does not belong to that district exclusively; it has been established by the state, and is subject to the laws of the state, which is interested, primarily, in the development of a high order of citizenship and manhood thruout her entire territory. A public school, I repeat, is not a local institution, and any system of organization which does not recognize the interest of the state in every one of her public schools, and which does not recognize the duty of the state to see to it that her interest therein is properly safeguarded and properly respected, will inevitably be wanting in that unity which is absolutely necessary to rational progress. Any school system in which the principle of unity is not recognized, or in which it is but feebly recognized, will result in a multiplicity of systems, each more or less antagonistic to the other, thereby defeating the purpose of the people, who, in the constitution and the laws of their state, have declared there shall be one system only.

I fear that President Seerley, because of his devotion to the rights of the individual, has fallen into two errors. The first one of these errors is that the gradual enlargement of the authority of the superintendent of public instruction or of the state board of education is a movement which is leading in the direction of educational autocracy, which will reduce the local school officers to a state of educational peonage, and which will, finally, destroy the affection of the people for their own schools in their respective communities. So far as I am informed, there is not a state in our Union that is today suffering, or that in the near or the remote future is likely to suffer, from vicious interference with local rights on the part of state educational authority. Certainly, of all the sections of the American Union, the South has furnished the highest evidence of loyalty to the political doctrine of local self-government, and yet she is rapidly learning the great lesson that local self-government is by no means inconsistent with state sovereignty. We in the South are beginning to realize the fact that the local community and the state at large have their proper functions

and that as civilization increases and becomes more complete the functions of each may vary. The ward of a city has a right to its existence; the municipality likewise has its functions; but surely he would be a brave, not to say a foolish, political economist, that would put the county and the state, and even the nation, out of business. One of the greatest problems in human history has been to devise ways and means whereby man can maintain his freedom and at the same time be loyal to institutions to which he owes allegiance, and whereby strong and efficient institutions may so function as not to encroach upon the rights and destroy the individuality of the rank and file of its membership. In the history of the world, the founding and development of the American republic is perhaps the most notable example of an attempt to solve the difficult problem above briefly described. The theory upon which our government is built gives a large place to the idea of local self-government, but it also leaves room for the exercise of rights and the discharge of obligations which belong to higher political units.

What I believe to be a second mistaken judgment of President Seerley is that the American state university is inspired in its work by the ideals of the trust—and by the ideals of the wicked trust, at that. Here again my observation and my information lead me to entertain an opinion directly contrary to that presented by President Seerley. Certainly, in the South, as well as in other states of our country, the policies of state universities have been democratic in the highest degree. In all the southern states during the last ten or fifteen years there has been waged a continuous campaign in behalf of popular education, and in that campaign university regents, university presidents, and members of university faculties have made large contributions in the way of time and service and money. From Virginia to Texas, university people have been preaching the gospel of democracy. They have repeatedly urged that the school system in any state is one system, and that the several phases of that system are not only important, but also necessary to the welfare of the people. The universities, because of the fact that each stands at the head of the school system, have, without apology, exercised the functions of leadership; but they have by no means regarded that leadership in a democracy means vassalage to the led. The universities today understand that leadership implies intelligent and consecrated service, and, with no hope of reward or fear of punishment before their eyes, they are determined to persevere in the discharge, in every honorable and practicable way, of the duties of educational leadership.

II. THE PROVINCE OF STATE BOARDS AND STATE SUPERINTENDENTS IN THE ADMINISTRATION OF PUBLIC EDUCATION

EDWARD T. FAIRCHILD, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, TOPEKA, KANS.

Altho forty-two states and territories have some form of educational board and state functions, and every state and territory has a state superintendent, there seems to be nowhere a definite and agreed statement as to the proper function and province of these agencies. It would be well indeed if the whole scope and function of these educational factors were thoroly studied and a wise agreement arrived at. Perhaps the majority of opinion holds that the superintendent should be an executive, while the board of education should be largely advisory in its operation. In practice we find that the duties and powers of the state superintendent range from the purely mechanical, or the merely perfunctory, to the most complete and almost autocratic power.

State boards of education also are found to differ widely in the authority imposed and the duties assigned.

From such experience as has fallen to the speaker, and from such study as he has been able to make, the following conclusions are submitted:

The superintendent of public instruction should be appointed, preferably by a state board of education which is itself, as nearly as possible, a permanent body.

The superintendent should be an executive officer with large powers of initiative.

He should be clothed with ample authority to carry out and enforce.

He should have time and means at his disposal to make an exhaustive investigation of all educational problems and conditions within the field under his control.

His duties and certain authority should extend to the higher institutions, as well as to the elementary and secondary schools. It should be his duty to come into the closest possible touch with the teaching body and with the student body, in order that he, of all persons, may know intimately their needs and stand as their advocate before the people.

He should be executive and constructive.

His relations to the state board of education and to the law should be such as to insure to him much freedom of action and full opportunity to propose, to devise, and to direct.

He should have large power, and yet his usefulness and efficiency may be greatly advanced by sharing certain authority and responsibility with others.

It is his province above all things to be a helpful and sympathetic coworker, a wise and loyal friend, an encouraging and inspiring leader.

To him is given the opportunity of the widest acquaintance with all classes and conditions of people. The opportunities afforded by his position are greater than are enjoyed by any other educational officer. The problems to be solved are more varied, and the means of solution more ample than in any other field of educational activity. It is the superintendent's task to seek by every means at his command to unify all the educational forces of the state, to labor in season and out of season for solidarity on the part of educators; to urge constantly the truth that in the rural school, the secondary school, the college, and the university there is but one common aim—the best possible training for citizenship.

That a state board of education may render the greatest possible service, it seems desirable that such a body should be permanent in character. The policy observed in certain states of providing by law or constitution that the heads of certain of the institutions of higher instruction shall be members of the state board of education, and providing further that certain other members shall be selected from designated school departments, seems to work well in practice. It is doubtful whether a system that provides for the appointing of all the members is either a safe or a wise one. Further, experience seems

to demonstrate that the state board should be composed largely of educators.

Because of the dignity and character of its personnel, a state board of education thus composed would be most effective in establishing and in sustaining public sentiment in favor of the highest and best things in education. Among the problems that may well be committed to such a body are the following:

The state board should be authorized and required to formulate courses of study for all classes of schools; to prepare examination questions and examine manuscripts of all applicants who aspire to teach in the public schools; to formulate rules and regulations for the distribution of all state taxes levied for school purposes, and to establish standard requirements for the various classes of schools benefiting from such funds: to fix the basis of promotion, and to determine the standard of accrediting the work in the grades, the secondary schools, the colleges and universities, and to provide rules and regulations for the inspection of all accredited schools; to inaugurate plans and advocate measures for the betterment of the school system; and when additional legislation is necessary to assist in formulating the needed enactments, and in securing their passage.

With a view to correlating and unifying the work of the various departments of education the state board may with great propriety and profit arrange conferences of college presidents, of superintendents of schools, of principals of secondary schools, of county superintendents, and boards of education. These boards might also be clothed with power to establish standards of qualifications for county superintendents.

An important function and one that may properly come within the province of the board is the authority to determine the unit of school organization, and to advocate by every means in its power the enlargement of such unit to a point equal in extent to the country.

A further important duty that might well be committed to such a body is full authority to organize and to direct the policy of teachers' institutes.

Further, the whole question of the requirements as to kind and character of school buildings, rules and regulations relating to fire protection and sanitary provisions should be placed in charge of the state board.

While some of the suggestions just made may seem to be away from, rather than toward, popular government, yet it is in full harmony with the trend of events today. City government by commission is rapidly extending and has proved to be the most efficient, the most speedy, the most economical, and perhaps the most satisfactory disposition of a vexed public problem that has yet been tried. Certainly it is a decided step toward centralization, and is at wide variance with the usual conception of popular government; nevertheless, results show that it is the best type of popular government in that the interests of the people are securely guarded, and inefficiency and extravagance are largely eliminated.

It is this principle that we would apply to the management of our schools. No system, as a whole, could be devised that is more extravagant, more wasteful, or less efficient in securing direct results than the system in vogue in this country with relation to the management of our schools. We have an army of over 500,000 teachers, managed by another army of over 2,500,000.

officers—a condition of affairs that insures extravagance, represents a vast amount of wasted energy, and renders certain a disastrous lack of unity and co-ordination. If, then, such powers as have been suggested could be placed in the hands of state boards of education and of state superintendents, might we not confidently expect that the business of our schools would be conducted with much of the dispatch, the authority, and the intelligence displayed by the commissioners in city government? Might we not hope for an improvement in the kind and character of our schools such as the fondest enthusiast and the most ardent well-wisher does not now dream to be possible for a hundred years to come?

Undoubtedly the powers and duties of state boards of education could, with great profit, be extended in practically all of our states. Above all, it is the province of such boards to be leaders in educational thought, the rallying point for schoolmen, and the center of school initiative. It might well be the fixed policy of every state to increase in every way the legitimate field of activity, and the dignity and importance of state boards of education. The state superintendent and the state board should be the court of last resort to which the public may with confidence come for wise and timely advice, and for the clear expression of the best and latest thought on all matters educational.

III. THE FUNCTION OF COUNTY AND CITY BOARDS AND SUPERINTENDENTS IN SCHOOL ADMINISTRATION

CHARLES H. KEYES, SUPERVISOR OF SCHOOLS, HARTFORD, CONN.

The strongest advocates of extreme centralization in government must admit that, in the practical and efficient administration of public education, four fields of authority must be occupied by local officials. The teacher, the curriculum, the school plant, and the school finances must be largely if not entirely subject to the control of local boards and superintendents.

The most important duty falling upon those charged with the administration of schools is without doubt that of selecting suitable teachers. The utmost the state can do profitably in this field under our American system of government is to prescribe the minimum qualification with which a teacher may enter into the service of her schools, and possibly certify to some higher grades of professional equipment for this work. We shall, I think, all heartily agree that the state shall fix the standard for the certification of persons as eligible to teach in her public schools; but the appointment and the assignment of teachers to any special set or system of schools must be left entirely to the local superintendent and board. This further implies the power to determine the salaries of teachers beyond a statutory minimum which the state may fix for all teachers toward whose wages the state makes any contribution from the public funds. The minimum salary laws which have been enacted in a few of our states do not undertake to fix the recompense of teachers in any particular city or town. They simply declare that the board

vested with the authority to determine salaries shall not fix any below the statutory minimum for the state. Niggardly boards in some localities will persist in interpreting the minimum limitation as a fixing of salary; but the fact remains that the local board must accept this responsibility. If it chooses to say, "We will establish salaries at the lowest figures the law permits," it has that right; but it cannot evade responsibility for the determination.

The local authority must also have the right to exact for its service qualifications additional to those prescribed in the common certification law of the state. To meet special conditions, to realize certain high aims for its schools, to warrant life and growth in its teaching force, local authority should always be vested with power to require for its service more than the minimum qualifications.

The supervision of the teaching force of the city or town must of course devolve on the local superintendent. So to help and guide a teacher as to enable her to do her own best work in her own best way is the function of the local supervisor to whom her work is daily accessible. But here again co-operation with central authority may be important. The character of the teaching acceptable as preparation for the colleges, normal schools, or other higher institutions supported by the state is a proper subject of consideration by supervisors representing the state and its higher institutions. So intelligent and sympathetic co-operation between state and local superintendents is often absolutely essential to the most effective development of local school systems.

In the matter of curriculum the state may prescribe the subjects which must be taught in all its schools. It has even undertaken to prescribe in some states the course of study which must be followed in all its common schools; but the utmost sanction such prescription may have, lies in the wisdom as a body of school doctrine. It becomes in any case advisory rather than mandatory. In cities and towns the right to reshape and add to such courses or to originate entirely new curricula must be within the authority of the local superintendent and committee. In the exercise of this authority, they are again prevented from enacting a course of study requiring less in quantity or quality than the general statute prescribes.

The limits of the school year may so largely determine the quantity of work to be done, that the authority vested with power to fix these limits must always be free to shape the curriculum. Material resources and industrial conditions may enter to demand variations in varying communities. Hence it will always be wise to leave this power with local school authorities.

The effectiveness of the course of study depends in a large measure upon the provision of the material conditions of its successful administration. The local officials alone have the right to furnish the books, maps, charts, apparatus, and supplies necessary or desirable in carrying the course of study into effect. They hold the community purse, and it is unwise to place in any other hands the shaping of the curriculum. These allied functions should never be usurped

by the state but should be left to the local committee and its supervising officers.

Here again it must be borne in mind that whenever schools of the local system are designed to articulate their work with that done in higher institutions supported by the state, it is important that local supervision shall be reinforced by constructive criticism emanating from representatives of the state and its institutions. It is this co-operation between state and local supervision that has built up the best secondary-school systems of the country. This has been done by state and local officials in some instances. Minnesota and Wisconsin furnish good illustrations of this mode. Again it is the result of joint work done by representatives of state universities and secondary-school officials. California and Michigan give us the best illustration of this method. It is also brought about by the intellectual and moral force of a higher institution not recognized by statute as having any relation to the local school. Massachusetts furnishes us the best example of this method of reinforcing local supervision of secondary schools.

Some states have wisely seen fit to prescribe thru their state boards of education or health, or both, common requirements as to the ventilation, heat, lighting, sanitation, and safety of school buildings. But the complete power within these prescriptions to determine the character and arrangement of school buildings, fix their cost and location, subject to the popular approval of the community, should always be vested in the local officers. In no other way can communities be educated to a proper responsibility for the provision of suitable school plants in which to educate a promising citizenship.

Control and maintenance of the school plant in keeping with the fundamental state regulation for health and safety is a function that must be discharged exclusively by local boards. The responsibility for poor or inadequate school buildings, or for good ones unsanitarily kept, must always be shouldered by the community; and accordingly the function of control and maintenance of the school buildings and grounds should always devolve upon the local authority.

Financial administration of the community's schools, subject on the one hand to a reasonable state exaction as to adequacy, and on the other to popular control of appropriations, is a fourth function that must always be vested in the local boards. This board alone can fairly and intelligently fix the tax rate for current expenses. Upon this board should devolve the duty of apportioning the school revenues among the four great occasions of expenditure: (1) instruction and supervision; (2) books and educational supplies; (3) maintenance and repairs of buildings and grounds; and (4) janitorial service and supplies.

The exercise of faithful and intelligent control over these four items—teachers, curriculum, school plant, and school finances—by the board and superintendent, directly responsible to the community, will result in the development of an educational sentiment that can never be developed under

state control. It will be based on the knowledge and insight that come from service, and will beget sympathy and interest. It will result in a popular conviction of responsibility for schools and teachers not anxious for vain-glorious leadership, but devoted to the highest service of the child.

Thus far in this discussion I have chosen to consider the board and superintendent in the city or town as the only types of local supervision. I have done this not because I am unmindful of the large school interests committed to county superintendents in many of our states, but because I believe this body of officers is representative of a transition in our educational development. Town and joint district supervision must come with the increase of population and wealth and the advance of educational ideals. Intelligent limits must be set to the territory and the number of schools for which supervision is expected from a single officer.

When this is done the supervisor of rural schools must stand in the same relation to state supervision as does the city or town superintendent.

DISCUSSION

W. T. CARRINGTON, president of State Normal School, Springfield, Mo.—One cannot take issue with Superintendent Keyes in any of his statements. He has presented well the general principles upon which any statutes relating to school administration must be formulated. There is not much to be said further than to agree that the function of the state in the administration of school affairs must deal primarily with the minimum, and leave to the county and city the right and the duty to go farther in any or all of the mentioned fields of authority.

It must be remembered, however, that local school boards get from the state whatever rights they have in levying school taxes, in holding the community purse, in supplying proper equipment, in prescribing courses of study, in determining the qualifications of teachers, and in fixing salaries and lengths of terms. It is, then, the duty of the state to provide as nearly as possible equal school privileges for all the children of the state, and equal burdens of taxation for that purpose on all persons and subjects of taxation.

To accomplish these ends the state must direct local authorities what to do, and must so administer its laws relating to schools as to accomplish the desired ends. In doing this it would not be wise to discourage local initiative nor, on the other hand, to encourage inactivity or permit any community to do less than provide standard opportunities for all children under its jurisdiction.

In recent years there is a strong tendency to centralize capital. This makes it the duty of the state to bear a larger proportion of the necessary expenses in maintaining schools, to the end that school privileges and burdens of taxation may be more nearly equalized. This duty of the state carries with it added responsibility in the supervision of schools. The state school moneys should be apportioned to local school units more liberally, and proportioned to their needs, conditioned in every case on the district's maintaining the best schools possible considering its ability. This would make close state supervision of a schools necessary, but would in no way lessen the responsibility or authority of local school boards and superintendents. The state would then inspect and ascertain the tax rate, the length of term, the qualification of the teacher, the salary, the curriculum, the school plant and equipment. Increased apportionments used as a premium on strong efforts to meet ideal conditions, and decreased apportionments as penalties for weak efforts will tend to equalize conditions, but will not bring to all children equal opportunities nor equalize taxation completely. Competent state officials should be authorized to levy sufficient

supplementary local tax within certain constitutional limitations to maintain high standards, when local authorities neglect or refuse to do so. The state should reserve to itself the right to remove a teacher who cannot or does not maintain as high standard of work as should be expected of the community, and to put someone in charge temporarily to bring the work up to standard, should the local school officials neglect or refuse to do so.

This should not be considered centralized authority. The state would simply exercise the reserved right when a local unit created by the state did not do all that had been assigned it to do. Such state supervision would not affect any community awake to the interests of its schools. It would not prevent or discourage local initiative. It would help to standardize the school work in all weak districts.

In advocating the fixing of standards by state authority, it is not intended that it shall be a leveling. Let there be mountain peaks of efficiency in our work, heavens lighted, as it were, to which those in the valley may turn their faces for hope and inspiration.

There are two extremes to be avoided in localizing authority in school administration. One is the inbreeding of low school ideals, a becoming self-satisfied and static; the other is a too frequent reshaping of courses of study and of policies, and the too frequent change in the personnel of the teaching corps.

If difference there be concerning the province of local school boards and superintendents, it is in the definition and limitation. By stretching Superintendent Keyes' *minimum* up to mean *standard*, we agree. Standard school work must not have frills or many of the things that have recently been added for the avowed purpose of enriching, but it must have all the essentials and look to results. Again I would have the larger unit have the last say. In all matters, both large and small, that is the best government in which authority is least exercised. That is undoubtedly the best school system that has little need for support or direction from without.

IV. THE PROVINCE OF STATE EDUCATIONAL INSTITUTIONS IN THE ADMINISTRATION OF PUBLIC EDUCATION

W. O. THOMPSON, PRESIDENT OF OHIO STATE UNIVERSITY, COLUMBUS, OHIO

The right to administer is based on authority. Usually this authority is delegated by statute. This authority is therefore always to be defined by an interpretation of the statute. Usually these statutes are of a broad and general character, leaving a large amount of discretion to be guided by intelligent judgment. Such delegation of authority is rather unusual, the reason being that most state institutions have been developed subsequent to the development of elementary education. Higher education is therefore looked upon as the outgrowth of the principles and methods employed in the more elementary forms of education. Historically, the higher education in the form of institutions under private control is practically contemporaneous with the development of elementary education. These institutions, however, were not regarded as a part of a system of public free education. The result was that their position in elementary education was influential rather than authoritative. Subsequently, the development of state universities was in the same general direction. These institutions were first regarded as a public form of higher education. Their correlation with elementary and secondary education was slow, gradual, and in most instances without any general

recognition of their legal relation to the other parts of the system of public education. At the outset, their position also was influential rather than authoritative. There was some resentment of any effort to assume any right or authority to direct and control beyond their own area.

These institutions of higher education usually were given power thru the trustees, or faculty, or both, to fix the standards for entrance, exit, or permanent enrollment as alumni. This control was complete as to the institution itself. The result is that all these institutions have acted under their rights, as defined by the constitution or statute, and have proceeded to outline with definiteness the area of higher education.

As these institutions have broadened their work, it became necessary that they should do a considerable amount of elementary work in the subjects of instruction. Secondary education could not lengthen itself beyond four years, and this period was not adequate for even a beginning in all the subjects that by common consent should form part of the education beyond the period of the secondary school. This has been true of work in modern languages and recently in some of the work in the classic languages where the elective principle has been adopted in secondary education. It was almost universal in science a generation ago, and at this date the chief exceptions are physics and chemistry.

The situation referred to rendered a certain indirect control of secondary education inevitable. The fact that the colleges set the entrance requirements made it necessary for secondary schools to meet these requirements if their graduates were to go on with higher education. This control, at the outset, covered two points:

First—The subject-matter of the secondary school.

Second—The amount required for entrance to college and therefore for graduation from the secondary school.

As a result of educational conferences, in which the National Education Association has been the most active, there have been some changes agreed to by representatives of secondary schools and higher education. We are familiar with the discussion, if not contest, as to the source of control. There is a widespread belief that the secondary school should be complete in itself with more emphasis upon its own mission as a public institution than upon it as a preparation for higher education. Indeed, this principle is stoutly maintained as applying to the relation between the elementary school and the secondary school. Secondary-school men have with some justice regarded themselves as nearer the people and probably more competent to determine what secondary education should be than college and university men. Candor requires us to admit that the doctrine of specialization as developed in our colleges has narrowed the vision and probably chilled the sympathies of such men in the matter of secondary education. The university professor, long separated from popular education and intensely devoted to a limited area of a given subject, is apt to ignore or neglect other forms of education while

he develops a student who is entirely ignorant of education in its larger outlook. The importance of any study of education receives little emphasis in university circles. A very small percentage of the modern university faculty has any intelligence upon the problems of education. They are usually experts in their own chosen subjects, but far from it in the field of education. The result is that most of these men are not competent to administer any system of public education. The development of universities has been in the interest of technical scholarship and the advancement of science rather than in the preparation of men either to teach or to administer. The assumption that a man who knows his subject is always able to teach it is not well founded, since we are teaching students rather than subjects, and since the place of a subject in any educational system is a very different problem from the question as to the place of such a subject in the industrial or commercial or civic life of the people. These conditions make even the indirect control of public educational systems by persons in charge of specialized education always a matter of doubt and debate. The freedom of university education has left abundant opportunity for faculties to follow their own preferences in the arrangement of courses of study. This is not always an assurance that these courses will be arranged with a view of preparing men to teach in secondary schools, or of arranging them in such way as to allow the secondary student to make easy progress from the standpoint of his earlier preparation.

Manifestly, the administration of education is closely tied up with the question of revenue. While education is free, the machinery is expensive. There is a manifest tendency on the part of specialists in education to require a large expenditure for administration. This may be both necessary and wise; into that question I do not enter. I only call attention to the fact that the limitation of revenues marks the limitation of what can be successfully attempted either in education or in the administration of it. The specialist is quite apt to say that he is not responsible for anything other than the promulgation of a sound theory. It is his business to say what ought to be. He deals with the ideal. Those in charge of administration must deal with the real, and the most real of all problems is the financial one. At the present time there is a widespread feeling in every part of the country favoring more extended education. There is an equally widespread distrust of our revenue system, coupled with the feeling that little more progress is possible until revenue reform has been inaugurated. Revenues are not usually under control of those who administer. Persuasion is their privilege but not authority. The result is that the leaders in administering education are subjected to the will of those who hold the purse. This is probably a wise provision, but one cannot resist the statement that intelligence in providing revenues, as matters go, is an accident rather than a purpose. Moreover, there is enough of unintelligent appropriation of revenues of education to furnish the critical objector a good deal of argument in favor of economy and of limiting the authority of those who administer. So long as this condition

remains, and it is probably permanent, those who administer education will find themselves limited by the hard doctrine of necessity. Under these conditions it would seem as if the province of state institutions would be indirect rather than direct.

DISCUSSION

JAMES H. BAKER, president of University of Colorado, Boulder, Colo.—In the main I agree with the views of this paper, and believe that the influence of educational institutions should not be direct and authoritative, but indirect and co-operative. Since the principles of the subject have already been presented, I can do no better than to give one or two concrete illustrations: I may refer to one state where the State Board of Examiners, having most of the functions usually given to the so-called State Board of Education, is made up of appointees of the heads of the state educational institutions, one for each institution, and other appointees selected from the superintendents and principals of public schools. The plan so far appears to work well and has the elements that make possible a just balance of influence, opinion, and action, based upon a complete knowledge of all points of view and of the interrelation between the schools and the colleges. In this same state, the state university is accustomed to invite a high-school conference from time to time to discuss from the high-school standpoint the problems of admission, etc., and this conference is not weighted with university influence or opinions. The charge that college professors, devoted as they should be to their specialities, eager for results in their own field of investigation and instruction, and emphasizing the importance of their own, have not a sympathetic understanding of public-school problems is not without foundation. But I believe that the tendency is to connect every college department with the broad interests of the state and of the schools, and that administrative officers are trying to bring about a helpful understanding, by conference and co-operation, between college faculties and the schools of elementary and secondary grade.

JOHN R. KIRK, president of State Normal School, Kirksville, Mo.—By custom the chief care of school superintendents has become the elementary school. The predetermining of the procedure in high schools is largely surrendered to examining boards or to university traveling agents, called inspectors. The latter engage in dictating who the high-school teachers shall be and what may be studied in the high school.

The universities seem gradually to seek the control of all education thru standardization. They would determine directly the limits of colleges and normal schools and thru such action control indirectly the elementary schools. For proof of these facts read the proceedings of the North Central Association of Colleges and Secondary Schools.

The trend is to Europeanize American education. Avowedly the purpose is standardization. The universities set no bounds to their own functions and yet would hold the colleges and normal schools within narrow limits. They would also define rigidly the limits of secondary schools.

Voluntary standardization based upon principles of democracy is desirable, but standardization by centralized power is destructive of self-activity and self-respect. It tends to bring about castes in American education as the same exist in European education. The dean of a university teachers' college recently stated that normal-school presidents and professors were not in the same class with university professors. Another such dean recently told me that the girl graduates of his teachers' college held themselves to be of a higher social class than those preparing to teach in elementary schools. Similar illustrations are abundant.

Administration thru the universities very strongly inclines high-school teachers to adopt university views and ways, to imitate the university professors in school tactics, and to conform obsequiously to university requirements regardless of individual judgment or

efficiency of public education. Many teachers at this time are attending university summer schools solely because, as they state, they cannot otherwise maintain themselves in the caste which the university approves. Thus thru examinations, inspection, domination, and administration by universities we see self-respect destroyed, independence undermined, centralization increased, personal initiative discouraged, and American education Europeanized.

All this needs to be broken into. The poorest alleged teaching in our country is by university professors. Only a small percentage of them can pass muster as skillful teachers. They are lecturers, students, investigators, collaborators, men of lofty purpose, usually out of touch with the masses of humanity and unmindful of the fact that education is thru self-activity or personal initiative. The way of the lecture-room is the way of authority, always bordering on dogmatism. Some days after the lecture its content is pumped out of the student by the "exam" or the "quiz," usually requiring the reproduction of knowledge without much change in going thru the consciousness of the student.

A typical inspector declared recently that if the university admitted students to its doors, then the university must inspect and examine such students and prescribe what persons should teach them. While this man illustrates the unmistakable tendency toward centralization in education, the fact is that the universities need inspection at least as much as the high schools do. The existing scheme should be turned half-way around. There should be a new declaration of independence. If the universities will not modify their somewhat arbitrary self-assertiveness and seek somewhat modestly to mend their own numerous defects, then the high schools, colleges, and normal schools should enter the arena and participate in the administration of education as much as the universities do. I do not question anyone's motives. Some university men are among the best thinkers and teachers that we have. Some of them give form to human knowledge as no others can. Some make valuable discoveries. No university man, as such, ever did much to perfect public-school administration. Those in concrete relation with public education understand its administration. No others do or can. The university professor by instinct, occupation, and isolation is usually incapable of appreciating the condition of education at large. He is, therefore, unfit for administration. Even the fact of working with questionable efficiency for a little while in some public school never justifies the university professor in seeking to inject his ideas into education outside his own speciality.

Finally, the tendency to castes in education should be counteracted. Only by the principles of democracy in education may we hope to preserve democracy in government. But administration thru state educational institution means the substitution of monarchy for democracy. It is therefore to be avoided if possible.

IN MEMORIAM—THEODORE B. NOSS

G. M. PHILIPS, PRINCIPAL OF STATE NORMAL SCHOOL, WESTCHESTER, PA.

Dr. Theodore B. Noss, principal of the State Normal School at California, Pa., since 1883, and a member of the National Council of Education since 1905, died at Chicago during the winter meeting of the National Education Association of 1909. Dr. Noss was born at Waterloo, Pa., in 1852. He was a graduate of the Shippensburg, Pa., State Normal School and of Syracuse University, where he received the degree of Doctor of Philosophy in 1883, and on several occasions spent considerable time in European study and investigation. He was a fine scholar, a thoro student of pedagogy, highly successful as a teacher and as a school executive, enthusiastic in the cause of education and in every other good cause, a man of the highest character, loved by all who knew him. His death is a great loss to the cause of education.

WILLIAM C. BATES

FRANK A. FITZPATRICK, BOSTON, MASS.

William C. Bates was born July 29, 1854, in Hingham, Mass.; died at Cambridge, Mass., June 29, 1909. Educated in Hingham and Phillips Exeter, he was graduated from Harvard College in 1877. He became successively superintendent of schools at Hingham, Canton, Easton, Lawrence, Fall River, and Cambridge. Gifted with a charming personality, he combined rare tact with fine administrative qualities. Modest, loyal, faithful to every trust, he was an inspiration to his associates and a delightful leader in the community. Having climbed to the heights, he died when he could be of most service to those who believed in him, and to the cause of education in which he was ever a valiant soldier.

DEPARTMENT OF KINDERGARTEN EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—MISS MABEL A. MACKINNEY, supervisor of public-school kindergartens, Cleveland, Ohio

Vice-President—MISS LUELLA PALMER, Teachers College, Columbia University, New York, N. Y.

Secretary—MISS CAROLINE SEWALL, director of kindergartens, Denver, Colo.

FIRST SESSION.—TUESDAY MORNING, JULY 6, 1909

The Kindergarten Department of the National Education Association met in Trinity Church. Miss Mabel A. MacKinney, of Cleveland, Ohio, president of the department, presided.

The session was opened with a violin solo by Miss Janet MacDonald accompanied by Miss Gertrude Stone. After a short welcoming address by the president, Elmer Ellsworth Brown, United States Commissioner of Education, Washington, D. C., gave an address on "Preparation of the Kindergarten for Institutional Life."

Frank B. Dyer, superintendent of schools, Cincinnati, Ohio, read a paper on "The Place of the Kindergarten in the Public School System," and was followed by a second paper on the same subject by George M. Forbes, professor of science of education, University of Rochester, Rochester, N. Y.

A committee was appointed by the president as follows:

COMMITTEE ON NOMINATIONS

Miss Alma Binzel, Provo, Utah

Mrs. Alma Oliver Ware, Yankton, S. Dak.

Mrs. Margaret Grabil, Fort Worth, Tex.

SECOND SESSION.—THURSDAY MORNING, JULY 8, 1909

This department met at Trinity Church, the president, Miss Mabel MacKinney, presiding. A delightful series of children's songs was sung by Miss Griffith, followed by Mrs. Alma Oliver Ware, principal of kindergarten training school, Yankton, S. Dak., and Miss Alma Binzel, Normal School, Provo, Utah, who gave papers on "To Accord with Modern Educational Ideals, What Further Modification or Reconstruction of the Hand-work of the Kindergarten and Elementary Grades Should Be Made?"

A discussion of these papers by Miss Margaret Giddings, supervisor of kindergartens, Denver, Colo., and others, followed.

The Committee on Nominations reported the following names:

For *President*—Miss Luella Palmer, Teachers College, New York, N. Y.

For *Vice-President*—Miss Willette Allen, principal of Atlanta Kindergarten Normal, Atlanta, Ga.

For *Secretary*—Miss Lucy Ellis, principal of Phoenix Kindergarten, Phoenix, Ariz.

This report was accepted, and by unanimous vote the secretary instructed to cast the ballot of the department for the nominees.

The department then adjourned.

CAROLINE SEWALL, *Secretary*

PAPERS AND DISCUSSIONS

*THE PREPARATION OF THE KINDERGARTEN FOR
INSTITUTIONAL LIFE*

ELMER ELLSWORTH BROWN, UNITED STATES COMMISSIONER OF
EDUCATION, WASHINGTON, D. C.

In a paper before one of the affiliated societies yesterday I had occasion to refer to one of our American ideals, to which I should like to refer once more in connection with the topic of this morning—that is, the ideal which leads us to take a well-balanced interest in the individual, on the one hand, and society on the other. We refuse to be socialists merely and we refuse to be individualists merely. In a sense we are all of us both socialists and individualists. We realize that men are to live a great part of their lives in institutions, but we believe that the most complete life is not lived in one institution alone, and we believe, moreover, that man does not live in institutions merely, but has, each one, a place in the world apart from any existing institution—a fact of human life which makes men creators of institutions and not merely their creatures.

Still further, our institutional responsibility is to be kept alive all the way up and down, from the largest institution to the smallest group into which men enter for common purposes, and from the smallest group up to the widest reaches of social relationship. And this series narrows downward not only to the smallest group but to the single individual, and widens upward thru influences which individuals have set in motion.

Responsibility is to be kept at its highest pitch in our lives, as it will be, thru the realization of institutional relationships; and initiative is to be kept alive, as it will be, if individuals have freedom to remold and remake institutions.

In every institutional relationship each one of us is either a leader or a follower. The craving to lead and the craving to follow are both of them present within us. Both are wholesome in part and both may easily become elements of danger. The only safe institutional man is one who can stand alone. The man whose whole life is covered by the desire to lead or the desire to follow, or by both of these in different relationships, lacks that one last element which should make him most useful to human society.

The great word of the kindergarten is the word “together.” Let it not be forgotten that for the sake of a permanently safe and wholesome “together” we must give due place to that other word “alone.”

This “alone” finds its place and its strength in the fact that it is necessary to the highest religious development. It means that that man only is a wise and safe leader or a wise and safe follower who can disentangle himself from the temptations which beset both followers and leaders, and draw solitary strength from springs beyond the hills and stars.

But having given due place to the spirit that can stand alone, because

standing in the society of the unseen, we may safely come back to that ultimate ideal—the ideal of both the kindergarten and the nation, and of our personal life—the ideal which is social and institutional.

THE PLACE OF THE KINDERGARTEN IN THE PUBLIC SCHOOL

I. F. B. DYER, SUPERINTENDENT OF SCHOOLS, CINCINNATI, OHIO

I shall discuss briefly the place of the kindergarten in relation to the development of the child, in relation to the home, and in relation to the school.

The young child is a bundle of impulses. Some of these impulses lead to acts which we consider wrong, and some to acts which we consider right. If the good impulses are frequently repeated, the outcome will be a reaction that will be habitual. At different times the instincts of the child ripen and the child manifests certain tendencies; for example, at a certain time he has a tendency to walk, to talk, to sing, and many other activities. Before the impulse comes to do these things, not much can be done to develop or train the child in these matters, but when the tendency arrives, it should receive prompt attention.

It is the business of early education to afford wholesome conditions for the development of good tendencies, and either to starve out bad impulses by lack of suggestion, or to suggest and develop a reaction that is not harmful. To illustrate: the child at the age of two or three becomes conscious of the storm and feels a shock of surprise at a thunderbolt. If he looks about and sees the family greatly perturbed, he begins to scream. If this is frequently repeated, his attitude toward the storm is one of terror, not to be eradicated by later teaching. If, on the other hand, when his consciousness of the storm first is manifest, he looks about and sees the family serene, he gets an entirely different attitude toward the storm, and his emotion becomes one of admiration instead of fear. In like manner, most of the impulses may be diverted into wholesome reactions, if there is skillful suggestion at the proper time. From four to six is the most impressionable age of the child's existence. Then his interests are expanding beyond the narrow confines of his home and he is becoming conscious of nature and of society. The kindergarten comes at this age to guide his interests, to give him the right mental attitude toward the world and his relations to society, and to give him training in the formation of those habits which, as they accumulate, will largely determine character. We were told yesterday that there are two phases in learning a trade—instruction and practice. So with all habit-formation. We may say that every time we acquire a habit we have learned a trade.

In order that the kindergartner may be expert in this training, it is necessary that she have a knowledge of childhood, of its instincts, impulses, and tendencies, and of the laws of habit-formation, so that she may deal with children skillfully and speak with authority on such matters. She must have a knowl-

edge of music, story, and nature on the instruction side, and of arts, games, rhythm and many means of manual expression, in order to practice the child and develop right habits.

If character-formation is the end of elementary training, the teacher must have help, for not one-tenth of the child's first fifteen years of life is spent with the teacher. Further, many of the child's tendencies and habits are pretty well fixed before the child is six years of age. The importance of skillful education of the child's early impulses has already been mentioned. The parents must come to understand that the fundamental institution is not the school but the home; that the fundamental duty of the home is the training of children, and that a fundamental part of this training is the fixing of right attitudes and the development of right habits. The kindergartner is simply the parents' assistant. It is essential that she be given time to visit all parents and secure intelligent co-operation on their part. They should be brought out, willy or nilly, to the parents' meeting, where they should hear trained nurses, physicians, dentists, and expert counsel on the training of children. Mothers must be caught early. Eighty-five per cent. of our girls become home-makers, and few of them have any conception of the duties of motherhood. It is the duty of the kindergartner and the mothers' club to see that all young mothers are reached. In the city I represent, two afternoons a week are given to home visiting and over 5,000 visits were made in the past year. No school has done its full duty by its children unless it has aroused homes to a sense of their responsibility or acquainted them with the real meaning of intelligent co-operation in the training of children. In order to meet this need, the kindergartner should be a trained social worker.

The time is too brief to discuss the relation of the kindergarten to the school further than to suggest that two afternoons a week the kindergartners assist the primary teachers in games, songs, and occupations. Also, as the children progress thru the grades, the teachers should join in the parents' meetings and become acquainted with the mothers. The old fear which parents and teachers had of each other should be replaced by confidence and sympathy. The spirit of the kindergarten should permeate the schools and a mutual high regard of kindergartners and grade teachers for each other should be the rule. Thus the kindergartens may become the welding place between home and school.

THE FUNCTION OF THE KINDERGARTEN IN THE PUBLIC SCHOOL

II. GEORGE M. FORBES, PROFESSOR OF PHILOSOPHY AND PEDAGOGY
UNIVERSITY OF ROCHESTER, ROCHESTER, N. Y.

My theme suggests two questions to which I shall endeavor to give brief answers: First, if the ideal of complete organic unity of the kindergarten with the public school were realized, by what method should we determine and define its characteristic function? Second, what hinders the immediate

realization of such complete organic unity and how can such hindrance be removed?

The answer to the first question is simple. If organic union of the kindergarten and public school were complete, we should define its function by precisely the same method as that employed to mark the function of, say, the primary grades or the grammar grades. We should look to the genetic science of the child to fix for us the impulses, instincts, and activities which appear or mature in each period, and to make us acquainted with the functions and laws of these activities for each successive period. Upon this foundation we should build the correlated method and select the characteristic materials necessary to make this period yield its proper contribution to the ultimate ideal. This would take the kindergarten completely out of its position as an institution *sui generis*, take it out of its disconnection and self-sufficiency and place it in organic relation to the whole, as its founder intended. The application of this method from various points of view—physical, social, moral—would serve to complete the characterization of each period. It would fix the characteristic problems which the kindergarten has to study and solve, and by the very narrowing and defining of these make the study of the kindergartner more intensive and fruitful.

The difficulty which confronts us in dealing with the kindergarten is not, however, the defining of its function in the sense of which we have been speaking. Stated in its simplest terms, that is but one part of the general problem of genetic science; it requires the determination of the phenomena and laws of development, physical and mental, which characterize late infancy, and the making them the foundation of the corresponding educational process. The real difficulty in determining the function of the kindergarten is not scientific, but historical. It grows out of the relatively independent origin of the kindergarten and its consequent isolation from traditional educational institutions and agencies. The great task is to overcome this isolation and establish organic relation, and this is but a part of the most vital problem of our day—namely, to interpret the higher life of man in biological terms, the task of getting a genetic and organic conception of the whole life of the spirit, however expressed.

In the case of any institution we do not now expect to explain it adequately by finding its cause, but by working out the problem of finding its function and organic relations. We seek the end or purpose it serves in the individual or social economy. We are beginning to see that we cannot find the full explanation of any phenomenon in either individual or social life so long as we view it only as the effect of certain causes. We must see it as an organ, in reciprocal interaction with other organs, and performing a function in that process of adjustment in which all development consists.

This is true of the kindergarten as an institution. We must find its function in the education of today. We must raise to clear and definite consciousness its purpose and organic relations in the total process of social adjustment which we call public education.

Now all causal interpretation is factual—i. e., it explains what is thru what has been, while all functional interpretation is normative, it explains what is thru what ought to be—i. e., thru the end or ideal of which the existing is a more or less perfect expression. It follows that we cannot become clearly conscious of the functions of the kindergarten without equal grasp of the total end or ideal to the realization of which the kindergarten is to make its contribution.

To the formation of this norm or ideal of public education as a whole Froebel made profoundly significant contributions. His remarkable philosophic insight and intense interest in the practical problems of education enabled him to express the vital truths of modern idealistic philosophy as fundamental principles of education. These truths are: first, that the divine life is immanent in nature and man, and education is but the conscious realization of that life; second, that the self is essentially an active principle and takes possession of the world thru this activity; third, that the cosmic process in the universe, the historical process in society, and the life process in each soul is a continuous development to higher levels of appreciation and action; and lastly, that the factors in the educational process are not independent elements arbitrarily brought together, but essentially connected expressions of the life of a unitary being.

The educational ideal is being completely reshaped under the influence of these truths, but the outworking of such an ideal in institutions can never be accomplished by philosophic formulation alone, however profound or adequate it may be, for genuine philosophy is never anything but an effort to interpret and unify an empirical content. Separated from this, its profoundest categories, its loftiest ideals become only empty forms, than which nothing can be more barren and helpless. The whole popular disrepute and distrust of philosophy can be traced to those who, severing the cable which anchors them to reality, have taken what has been wittily called the "high priori" road to the solution of problems. Nothing is more pitiful than to see noble souls with sublime faith in the truth and power of philosophic conceptions, vainly endeavoring to use them as empirical guides and persistently hoping and believing that, with some deeper insight or more comprehensive grasp of their empty categories, they could penetrate the veil of that given reality upon the content of which and the order of which the profoundest philosophy cannot throw one ray of light.

No department of public education needs to ponder this truth more than the kindergarten, and the reason is found in its extraordinary origin. Froebel succeeded in founding a permanent institution where Ratke, Basedow, and Pestalozzi had failed, because he seized upon the one period in the development of the child which had not already been institutionalized, and so made proof against revolutionary change by centuries of tradition. Upon this period of infancy he brought to bear his philosophic conceptions in a genuinely revolutionary way, but notwithstanding his knowledge of, and profound sym-

pathy with, children, and the rare practical intuitions which guided him, there were serious defects on the empirical side. No sympathy and no intuition of a single individual could hope to establish the empirical order of physical and spiritual growth in a child. Nothing but the most long-continued and thoro application of the scientific method could solve this tremendous problem. Nor could the science of matter alone prepare the way. A science of life was needed and the vast work of the fifty-seven years since Froebel's death, in the working-out of the conception of organic evolution, has laid the foundation of such a science.

The irresistible sweep and transforming power of the conception of evolution as it advances into the life of society and the individual renders it epoch-making in the history of human thought. The genetic conception and method of child-study is one of its products, and to this we must look to fill the otherwise empty categories of self-activity, connectedness, and development with a rich, concrete content.

Take for example the conception of self-activity. Genetic science has transformed our conception of the self. The philosophic notion of an absolute self, projecting its activity by a sort of absolute inner initiative, is utterly untrue to the real empirical self. Analysis shows that the empirical self is one aspect of a unitary process, the other of which we call environment, each organically connected with the other so that every action is a reaction, or perhaps better, every new phase of development is an instance of interaction. It is impossible to exaggerate the influence of this rectification of our notion of self, and this we owe wholly to genetic science. In the light of this truth we see that every human action is conditioned by heredity and environment, taking environment in the broad sense which includes all human as well as natural influences. This truth compels philosophy to reinterpret from the ground up its doctrine of the freedom of the will; while its influence upon our view of the so-called badness of the child, and the weakness, inefficiency, or criminality of the adult is nothing short of revolutionary. Instead of ascribing these defects to an absolute activity or will of the self, we ask why these defects exist, and are increasingly finding our answer in the physical and social conditions from which the self comes and in relation to which it develops. The slowly dawning consciousness of this truth and its vast consequences in education, philanthropy, and jurisprudence are evidenced by our Judge Lindseys and Browns, our probation courts, the indeterminate sentence, the wholesome schools replacing the prisons for our young delinquents and criminals, and the increasingly vigorous assaults upon foul tenements and deadly sweat shops and slums.

Thus must science help to reveal to us the full meaning of that self-activity which is to constitute the very soul of the educational process.

In like manner, did time permit, it might be shown how the other Froebelian categories of development and connectedness are dependent for their concrete content and meaning upon the work of empirical science, and, in particular, how empty and worthless they are for the teacher until science has discovered

the laws which determine the order of unfolding of the one and the fixed coexistences of the other.

Doubtless many of you are thinking that Froebel did not ignore the empirical factor, and this is true, but it is also true that he did not employ the scientific method in dealing with it. Froebel was not merely philosopher. In him the deep-seated poetic and animistic instinct which makes all nature spiritual reached its climax of intensity and refinement. The infinitely varied moods and phases of nature presented subtle analogies to his supersensitive spirit, orphaned and isolated as it was in boyhood, and thru these analogies he saw the whole spiritual life revealed in nature in a purer and more perfect way than in man himself. He thus endowed the sphere, the crystal, the tree, not only with positive spiritual qualities, but with power to impress them upon the soul of the child. He thus ascribed to nature as original endowments that which was but the reflection of his own developed spirit. This is the key to the semi-poetic symbolism which so largely influenced his choice and order of materials, a choice and order which rests upon no scientific basis. The saving influence was his practical sympathy with childhood and the rare insight which enabled him to see the significance of play, and select many appropriate forms of activity. Thus for him the problem of the empirical content was solved partly by an imaginative interpretation of nature and partly by the suggestions and intuitions growing out of a deep sympathy with childhood. In the development of the kindergarten this product of Froebel's semi-poetic imagination has been confused with that genuine philosophic insight of Froebel's which reached and formulated the fundamental categories; hence the attempt to solve the problem of empirical content by the symbolical method. This has given rise to the notion in the thought of many kindergartners that their institution occupied a permanently unique position; that it possessed in Froebel's teaching a complete philosophy and method adequate to the solution of all its problems. Such a view, so far as it has prevailed, has tended to isolation and a certain exclusiveness. It has erected barriers to complete unity with other departments of public education, and has retarded the whole-hearted appreciation and appropriation of the results of the scientific study of the child.

If this view be correct, it suggests that the most important step in the progress of the kindergarten toward its true place and functions in public education is to abandon completely the symbolical element in Froebel's teaching as having no practical bearing upon the development of the child. It is but another attempt like that of Ratke and Comenius, tho the most subtle and refined of all, to deduce a priori a method of instruction from analogies derived from nature. The true method is to be found in the thoro study of the laws of the child's own physical and mental growth as revealed by the patient inductions of genetic science.

The kindergarten can never find or fulfill completely its proper function in public education until it finally abandons the symbolic for the scientific method of working out its practical principles and selecting its materials.

It is sometimes said that all education from the most elementary up to that of the university should conform to kindergarten principles, and this is true in the broad sense, and it is also true that the kindergarten has exercised, especially in this country, a powerful transforming influence upon all higher education, but this is only to say that our educational ideals and educational practice are being molded by the great philosophic conceptions and scientific achievements of our time, and this general influence of Froebelian philosophy does not serve to determine the final function of the kindergarten in public education. The truth is that just in proportion as these great truths and generalizations become principles of all education, just in that proportion does it become impossible to define the function of the kindergarten by reference to them, just in that proportion must the kindergartner give up her missionary function and find her place and work solely in that limited sphere of the child's development over which it is given her to preside. She will fulfill her sole function in applying those universal principles, common to all periods of public education, to the one period between early infancy and early youth. She will therefore no longer represent in any unique way the permanent principles of Froebel. All public education will represent the principles of Froebel brought into complete synthesis with the generalizations of genetic science, and, as one all-embracing organism, will endeavor to work out these principles in the making of the man and the citizen.

*TO ACCORD WITH MODERN EDUCATIONAL IDEALS, WHAT
FURTHER MODIFICATION OR RECONSTRUCTION OF
THE HANDWORK OF THE KINDERGARTEN AND ELE-
MENTARY GRADES SHOULD BE MADE?*

- I. MRS. ALMA OLIVER WARE, HEAD OF KINDERGARTEN DEPARTMENT,
YANKTON INSTITUTE, YANKTON, S. DAK.

The ideal of any age, like the spirit of the times, is of slow birth, and springs, not as Minerva, full-grown from the head of Zeus, but rather, struggles into existence conditioned by the needs and modified by the circumstances attendant upon, and prior to, its appearance.

This view implies that the development of ideals is an evolutionary process; that ideals change as the world advances and express the stage of civilization from which they spring.

Each civilization has made its own peculiar gift to the world. We look with interest and wonder upon the pyramids and mummies of ancient Egypt, and pause to consider that those imperishable vaults, those dried and wrinkled bodies, remain an enduring monument to tell us of the Egyptian idea of the immortality of the soul. For three thousand years the soul must wander, but at the end of that time it will return to reinhabit the preserved and waiting body. Athens gave to the world the ideal of beauty and harmony; Sparta courage;

Rome power. The Hebrew nation presented an ideal of a righteous God, the ideal set forth in a code of laws and impressed upon its children to be handed down as a rich legacy to succeeding ages.

But no age could pass on its ideal unchanged; for with each succeeding stage of civilization new conditions arose out of which came a new point of view, transmuting any inherited ideal into its own, modified by the peculiar conditions of the age until so changed as to appear to be independent of any previous influence. Thus the educational ideal must change and advance as conditions change and the world advances.

In an effort to realize its ideals each nation has had its own problems to solve, and these have involved serious undertakings; as Spain in her effort to carry out her idea of the colonization of the western world, or England in standing for constitutional rights. America's national ideal of liberty and equal rights reached its culmination after years of growth and development: Freedom to do, the right to accomplish, with the ultimate purpose, citizenship. American citizenship demands effort and calls for the best interpretation of that freedom to do; and he who is doing the most to set forth this ideal is the one who is living freely and fully, expressing his God-given powers for his own self-realization. For the germ of society still lies in the individual, and only thru the development of the individual may we hope to strengthen society and its ideals.

America's problem, then, is one of industrial freedom, a problem which cannot be solved by law, but must be worked out thru education. As needs and conditions give birth to any nation's ideals, so must the needs and conditions which brought forth our ideal of industrial freedom determine the method of solving this latter-day problem. Industrial freedom implies that each man or woman is able to earn his or her own living. In solving the problem, what educational factors are at work? what shall be the spirit of the educational system which shall meet it?

It has long been an acknowledged principle that all educational training should tend toward the formation of individual character, and our task is so to co-ordinate the educational factors as to build up character while working out this problem of industrial freedom. The strong cord of a well-developed character, standing the test of strain and time, is twisted and spun of the three seemingly simple threads—feeling, willing, doing. Training for industrial efficiency takes care of the training for character in that it links up the *doing* with the *thinking* thru the *willing*; for back of free will is choice, and the motive power of choice is interest. In our educational beginnings we seem to have left out the *thinking* and the *willing* and to have depended upon the *doing*; and this is our great danger; for industry which does not call for individual initiative, which does not develop *will* thru motive—choice—is drudgery, routine, and leaves us still “dumb driven cattle,” bond rather than free. Freedom comes thru obedience to principles or laws. The freest man in civic life, the freest man or woman in the industrial world, is that man or woman who

finds working principles which give purpose and guidance to all work. Education must supply these working principles.

The educational factors in our problem of industrial freedom are the same old story of heart, hand, and head—or, feeling, doing, and thinking: First, arousing the feeling of sympathy with and an appreciation of the value of work; second, the training of the hand to technical skill, with a sufficient general knowledge to see the particular work in hand as a part of a larger work; third, developing creative power, which will make work a joy and not a task. These factors would tend not only toward individual efficiency, but would develop such a strength of individual initiative as must enrich the state. The student who awakens to a sense of sympathy with the worker will also learn that in doing the work it is more often the worker who is refined and polished and perfected than the finished material product. He will learn to set a value upon work well done and gain a respect for technical skill which must prove a motive power to his own endeavors, as well as an open sesame to our great American commonwealth.

This may seem beyond the kindergarten and primary grades; but as these must wisely be a part of the educational system, they are the beginnings of what we carry on and work out in the upper grades. Today it is a recognized fact and has led to significant changes in the curriculum. For many years the kindergarten was simply the place to work off surplus energy, and in expending this valuable power the child was allowed to follow the caprice of the moment, if thereby he found pleasure. This idea was the result of an unintelligent interpretation of Froebel's "follow the child's lead." We followed that lead until it gave us a will-o'-the-wisp chase, and seemed very near to an absolute divorce of the kindergarten from the rest of the school system. There came a demand for correlation under a practical and better working knowledge of psychology. Kindergartners began to understand more simply the action and reaction between mind and muscle, the building-up of right ideas which should become dominating principles, and an intelligent comprehension of the scope and limitations of imitation. We now know that the truest imitation which has educational value is not mere copying, but getting hold of that which lies back of an outward demonstration. To quote Froebel, "No outer form can serve as a model; we must find the spirit."

Let us consider for a moment the three factors which we find at work all thru the grades and see how they must influence the handwork of the kindergarten. First, the arousing of sympathy with work and an appreciation of its value. I will grant that much of the sympathy which one has found in kindergartens has run itself out into the veriest treacle of sentimentality. We need good wholesome sentiment and plenty of it, but leavened with rationality, and this latter ingredient supplied, not in homeopathic doses, but spread on as thick as a child likes the jam on his bread.

We must discriminate in our praise of the child's work, lauding effort more than product, thereby aiding him to a realization of the fact that the value of

the work is only commensurate with what he has put into it of honest effort. Very small children feel this long before it is a matter of intelligent comprehension. Very recently a boy of six years came across the kindergarten room holding up his piece of work saying, "Do *you* think this is *very* good?" the expression on his face indicating dissatisfaction. I felt no fear of discouraging him by saying, "Well, it is pretty good, but I believe you could do better." Quick came his answer, with scorn in his voice: "Mary says it's fine, but I don't think she knows, for I didn't try very hard." The work had not called for effort, and young as he was, he felt it. In arousing sympathy for the worker let us see to it that we, at the same time, develop the appreciation of the value of work.

A child's natural activity is motive power enough to make him do things; his imitative instinct will prompt him to reproduce the activities close about him. This he should do. If this were all that were necessary we should not need trained kindergartners. But education must come in to lead these instincts into the best expression. If the higher grades work for character and efficiency along lines of rational sympathetic relation to the world's work and an appreciation of honest labor, then we must work for this also. We cannot expect the little child to have much technical skill; but, knowing that technical skill is a step toward industrial freedom, we can lay the foundation. In laying this foundation we must keep in mind that as stones overlap in building, the line of cement which binds them together is unbroken and ever ascending. We speak of each grade in school as separate and distinct, knowing that there is the constant overlapping. The kindergarten begins the first-grade work thru concentration and self-control; therefore technical skill finds its beginnings in the guided hand and in the kindergarten phase of attention which comes thru interest and is, therefore, involuntary. I have in mind the children five or six years of age; for children admitted to the kindergarten before that age are to find themselves in relation to society thru the community life of the kindergarten. And this is a stage invaluable to the little child, giving him opportunity to learn the great moral lessons of give and take, his own rights, and the rights of others. And yet even the youngest child is training *toward* technical skill when he learns the use of the scissors. Great effort he makes, with fingers rigid as tin soldiers and mouth drawn to a knot, as he responds to "open—shut them" in his effort to cut across a piece of paper; or, in the folding, when he puts forth his best effort to make one edge come over and just fit the other side.

Technical skill is *control plus accuracy*; and we are only doing our part of the educational work for industrial freedom when we lay such a beginning as will give not only opportunity to *do*, but an appreciation for *accuracy*. What is worth doing at all is worth doing well, even in the kindergarten. Most of our handwork in the kindergarten and primary grades has partaken too much of the nature of "busy work," simply to occupy hands that otherwise might be found idle and get into mischief. Thus "busy work" is used as a

help to keep out of reach of the wily, wicked one, but more, to relieve the teacher who is either overworked and does not know what else to do, or, from lack of intelligent training, cannot plan to meet the needs of the growing child.

Recently I visited kindergartens and primary grades in some of our large cities and found in a good neighborhood fifty-two first-grade children with one teacher and no assistant. When asked about her handwork the teacher in charge confessed to the idea of "busy work," also that she knew nothing of the kinds of handwork which would prove educational, as she had had no training along that line. In another room there were fifty children, and again the untrained teacher; but in her desire to give the children work eliciting interest this teacher had accomplished much by way of occupation, but not such work as met the needs of the growing child. At the end of the first year the children had made advance in words and numbers; but in handwork there had been advance neither in a knowledge of the relation of the child's work to the world's work, nor in the development of individual initiative.

Our primary teachers have need of kindergarten training in handwork, and our kindergarten teachers training in primary methods. Never shall we have the intelligent overlapping which makes education a continuous unfolding process from one grade into another until this is done. And I heartily indorse the suggestion for *one* supervisor for both these departments and urge that the prerequisite for such a position be satisfactory training in each.

We have placed commendable emphasis upon spontaneity and self-expression, but have we done our full duty, in view of our modern educational ideals, with the problem of handwork? Are we so training the child that he will learn the value of work; that he will respect and desire *accuracy* which comes from obedience of mind and hand to laws and principles? From these will come that *creative power* which is the highest factor toward freedom of the individual, and becomes the very art of industry. Says Browning:

It is all triumphant art, but art in obedience to laws.

We can still have our spontaneous free play with material, and every opportunity for free expression; but at the same time give our handwork in such a manner that children will not only get hold of some constructive principles which will develop a keener appreciation for accuracy and lead to creativity, but principles which will be used in the grades and even in the manual training. Creative work, that which *outers* the divinity within, and makes us free indeed, comes only thru power gained from knowledge of working principles, however simple they may be.

And for the little child these principles must be simple and yet clearly given, advancing with his development both physical and mental. We respect the immediate demands of each stage and yet bear in mind the overlapping continuous process, and begin in one that which will be carried on in the next—"Tracing what must be, and what may yet be better." This is the only rational method whereby we run no risk of arresting development nor, on the other

hand, the danger of overstimulating the creativity. To illustrate: One form of handwork closely related to the world's work is the constructive. This is with stiff paper of satisfactory colors and firm quality which has been introduced into many of the schools and given good results. We cannot forget that while the teacher is working for process, the child is putting forth *his* effort for results.

In the kindergarten we give such work with this as introduces the principles of construction, the intersection of planes, "based on the universal forms of geometry and including the fundamental principles of all construction." As the child plays with the two-inch forms in the Gifts, it is well to begin with the two-inch paper as the plane of the known solid; also that thru separation into parts he finds for himself the one inch, which is the world's standard of measurement. Giving the child the principle of intersection, by means of which surfaces are held together, is helping him to get hold of an inner constructive principle—the dovetailing of the constructive world. "All dovetailing, hinging, bricklaying, mortising, are ways of intersecting surfaces so that they hold each other together." Most of the forms made by man can be made by the child with the cardboard thru intersection. The child is educated thru getting hold of the *constructive principle*, by finding and using that which makes.

In crowded first-grade rooms we cannot have the noisy construction work with heavy materials, but this is a work governed by the same principles and giving satisfactory results to the child, which will give him opportunity for accuracy and develop creativity. First, free-play with intersection of two-inch planes, not an indefinite surface, but a definite one; second, thru division, the finding of the one-inch which is the standard of measurement, on to using any sized plane, but governed by the unit of measurement. Soon the child learns the controlling principle, and launches out into *relative measurement*, and then he feels free and has a joy in creating which comes thru strength of victory.

Please remember that this work goes into the grade room. I plan only to begin it in the kindergarten, but to begin it so intelligently that there will not be unlearning or beginning over, but unfolding and advancing. This same idea of getting hold of principles might be worked out thru *any line of handwork*, but the construction leads into all industrial work.

As the child gets hold of the principle of construction he ceases to be satisfied with mere copying of old forms, and reaches out to new expressions of skill, the variety in result giving an added stimulus to further effort. This seems to solve the problem of the "busy work."

I have here a few simple illustrations of this one particular line of work and shall be glad to discuss it with anyone wishing to see how it is one of the beginnings of technical skill, as also a rational stimulus to creative power.

Without these the individual is a copyist, but with them he becomes free indeed, for he has gained the spirit of work which lies in the working principle.

II. ALMA L. BINZEL, PRINCIPAL OF NORMAL TRAINING SCHOOL, BRIGHAM
YOUNG UNIVERSITY, PROVO, UTAH

The educational ideal of today can be found in the answers to the following questions: (1) Who shall be educated? (2) What shall be the character of the institutions that educate? (3) What shall be the results of the educative process?

The ideal is that of the education of *all* individuals in institutions adapted to the respective needs of differing groups, to the end that every member of these may realize the best for which nature has given the endowment and which society demands. It is this ideal which has given rise to the special schools and classes for the subnormal, and which is changing the elementary school so that it may minister as never before to the differing groups of which it is constituted. Where once we sighted but one goal—high-school life—today we see several, prominent among which are two—domestic and industrial life. These have made, and are making, their claims upon children of elementary school age and capacities; hence the question: "What shall be the character of the course of study so that reasonable preparation for high school, the industries, and domestic life is available for *every* child?"

Studies of elimination by grade and age show that the sixth, seventh, and eighth grades retain the smallest percentage of pupils; show that children of thirteen, fourteen, and fifteen drop out in greatest numbers. What becomes of these? According to the *Report of the Massachusetts Commission on Industrial and Technical Education*, the place to look for these children is in the ranks of unskilled labor. In Massachusetts less than 2 per cent. of the children who begin work between fourteen and sixteen are employed in the high-grade industries, and 98 per cent. in unskilled and low-grade industries. If entrance into these industries were merely the first step in vocational training, to be followed by succeeding steps involving more training and advancement, any great concern might be unnecessary. The textile manufacturers assert, however, that "the child who does enter closes behind him the door of progress to a fair living wage."

Is the ideal of an elementary school so attractive to children and so intelligible to parents as to check this early dropping out, with its consequent evils, too high a one to be attained in the fairly near future? Upon every hand one hears of the necessity of making schools less school-like; of bringing the home, occupations, and school into closer relationship. By showing that books are not the only important source of educative experiences, that theory and practice have been too widely separated, handwork has contributed a share toward vitalizing schoolroom procedure; but its achievements have been limited both in extent and character.

Of the thirteen hundred and forty-eight school systems in cities of four thousand or more inhabitants, barely half have handwork courses and only about one-ninth have the work in all the grades of the elementary schools. For children in eight-ninths of the public schools there is, then, no immediate

prospect for that gradual preparation for domestic or industrial lines paralleling in amount that for later academic work.

While it may be questioned whether a discussion of the extension aspect is in order here so far as terms "modification" or "reconstruction" are concerned, there can be no doubt of its being called for by the analysis of our "modern educational ideals."

The comparatively slow spread of handwork both into new localities and into the lower grades has its specific causes in the indifference of the public and in the traditional methods and preconceived notions of the school-world. Growth of almost everything from the top downward is the outcome of the common tendency to undervalue the capacities of the earlier years. Necessary changes in courses and equipment do not materialize because of failure to appreciate the importance and possibilities of beginnings. For instance, in domestic lines, the food preparing and serving, and the cleaning phases are postponed until the later grades, whereas the sewing-room phases are introduced earlier. Is such an arrangement justifiable upon the ground of immaturity of the pupils? It would seem not: First, because a number of experimental schools and kitchen-garden schools are demonstrating that the so-called domestic-science work in the kindergarten and lower grades nets as good results, grade by grade, as does the so-called domestic-art work; second, because questions put to grown-ups concerning the age at which their mothers trained them in the ways of the household reveal the fact that most of them were fairly proficient in simple cooking, baking, and cleaning at the age when most schools now provide for the beginning of such work; third, because of data obtainable in communities where the much-lauded, old-fashioned home training still prevails. Questions were recently put to seven families in such a community; they brought returns which suggest that both capacity and home claims would support a different arrangement than the common one. We all know that the desire for assisting in domestic activities manifests itself early in the normal child; that the wise mother accepts the offers of help, encourages the child to learn thru experimentation, imitation, and direct instruction, and gradually places upon the child the responsibility of the regular exercise of acquired power as its share toward the service which family life entails. If the character of American housekeeping is to be changed, as we are led to believe it should be in the near future, training that will develop both intelligent maids and mistresses must be provided, and that early in the life of those who are now girls in the lower grades of the elementary schools. Under-valuation of power, and ignoring of the immediate as well as the slightly remote claims, must cease. This is true not only in case of the girls but also in that of the boys for the lines of work they are likely to pursue. An investigation of work engaged in out of the schoolroom indicates that the demands of the ordinary handwork courses in schools do not begin to make the demands nor afford the training that the boys' home-work does. The same families are represented in the returns. While these investigations scarcely merit the term of studies because of their

brevity, the ideas they suggest may be helpful in a reconsideration of the hand-work courses offered to boys and girls in school. Let us guard against unnecessary postponement and also against making demands that are beneath the dignity of the powers of those who are supposed to profit thru the courses offered. Unless we do so we cannot hope to counteract the prevailing tendency to drop out of school early for the purpose of engaging in what seems worthwhile activity.

Reverting to phrases used earlier in the paper, one might here ask whether we are not overestimating for all but the larger cities the disappearance of opportunities for the old-fashioned training, and also whether a closer relationship between school and the home, farm, or workshop cannot be fostered by a change in general plan of procedure.

Would it not be possible in many localities to find and utilize activities for a more effective training than the schools for a time will be able to provide? The school might give, in some cases, the theory whereas the home, farm, or shop might furnish the opportunity for practice. A wide range of activities might thus be opened up. The scope of some might become vastly different for they might be made to have the triple value of counting for school work, of accomplishing necessary work in a better manner, and of disseminating vital knowledge. Let me make clear my meaning. In a town where cows are a very common possession and where their care falls largely to the growing boys, important lessons upon pure milk and method of securing it would be the schoolroom phase; its outcome would be the actual improvement of conditions under which this common and important article of food is usually secured.

Take for another illustration that frequently recurring kitchen duty, the washing of dishes. "What constitutes the economical and correct order and way of washing dishes and of caring for articles used in the process?" would be discussed as a matter of class-work and again the practical work would be done elsewhere, credit being given in accordance with prearranged plans understood by parent, teacher, and children.

To some the repetition involved might seem to detract from the educational value of such a scheme of co-operation. Dr. Meyer's article in *The Psychological Clinic* calls attention to the danger of knowing things without doing things, not only in cases of children the development of whose tendencies are characterized by lack of proper balance, but also in others not so handicapped. He urges that we spread among teachers and pupils a realization of the fact that knowledge must be a knowledge of doing things, and next a knowledge ready for doing things. "It is lamentable to hear youngsters, encouraged by elders, refuse to do certain things because they already know how to do them. When doing things becomes less attractive than knowing things, an avenue for disappointment, if not for failure, has been opened up before the pupil."

The scheme of theory in the schoolroom and practice outside would hold for many lines of work; not for all. To some it may seem a very visionary

one, but the longer it is harbored, the more its possibilities reveal themselves. In many localities it would, for some time to come, afford the only chance of intelligent preparation for domestic and other activities. Moreover, the by-products of such a scheme would be decidedly valuable. It would bring parents and teachers into frequent consultation, thus improving both the home and school phases of the educative process; it would check the growing tendency to unload upon the school the entire responsibility for the training of the future members of society. As someone said a year ago, "The demands upon the school system have multiplied from the comparative simplicity of the three 'R's' to include the three 'H's' and the three 'C's', to say nothing of the three 'B's'—the supplying of body, brains, and bringing-up." The Department of Women's Organizations, the International Congress for Home Education, as well as many other organizations, are bending their efforts for a co-operative study by the home and school of the serious problems connected with education. If real progress is desired a beginning must be made with education in the home. The suggested scheme of co-operation for certain lines of handwork might be an entering wedge for the reshifting of responsibilities and the actual, tho indirect, improving of the homes involved. The second by-product might thus be the valuable one of raising standards, so that given groups would actually rise to higher levels because of more skillful and intelligent execution of the routine of daily labor.

A uniform course of study should not be sought. While the general needs of life will give rise to a number of similar problems, the variance in activities of communities will furnish the individually unique ones, thus extending the scope of that which has gone by the name of handwork or manual training. Suggestive articles upon "Poultry Raising as a School Occupation," "The School Garden and Correlated Activities," and "The Farm School" have appeared recently. They show how handwork courses may outgrow the charges of "anti- and un-social," of "isolated and impractical," of "irrational" and "valueless in content," and become vital as immediate experience, as social training, and as preparation for industrial or domestic life.

Elasticity in course of study will prevent misadjustments similar to the following: A certain suburb of a small city supplies the latter with most of its housemaids; the work of these is chiefly that of cooking, baking, and cleaning; their preparation for it is received in the homes, largely of a lowly type. The public-school courses of the community offer art needlework and plain sewing as handwork courses; the housekeepers of the city continue to complain of the inefficiency of the maids whom they secure. Their protest is like that heard thruout the length and breadth of the land, and yet the public schools, in the main, are offering domestic-art phase first and domestic-science phase later, when parallel courses, or a reversal of the usual order, could be arranged. The house, its care and cleanliness; food, its preparation and serving, would thus receive the attention which they merit because of their relationship to well-being.

To those who hoped for definite and well-articulated suggestions concerning handwork in the kindergarten and elementary school, this paper will prove a disappointment. Its character is determined by two facts: first, the difficulty of finding a common starting-point from which changes should proceed; second, the necessity for elasticity in courses of study so that the needs of different groups of children may be studied in connection with that which their respective localities offer in opportunity, and demand in service, with reference to industrial and domestic life. Could we place in a kaleidoscope the six hundred and seventy-one school systems that offer some handwork, and turn them about, we would find it difficult to determine the particular point from which modifications and reconstructions should proceed. Such an exhibition of the work would show formal work with traditional kindergarten materials, the once popular busy work, the conventional sloyd exercises in some places, and, in others, the wide variety of materials used as mediums of expression, used in vital, social occupations, and constructive activities.

The handwork courses should be selected in the light of an aim that includes both living and preparing for the earning of a livelihood; that seeks to make human beings, rather than good machines. Appreciation and execution, initiative and independence, adaptability, and versatility, are essential in the make-up of an intelligent worker. For the make-up of an enjoyer of leisure there should be tastes that rise above the commonplace to the beautiful in color, form, and sound, whether in the work of man or nature; there should be insight and responsiveness toward that which makes for comfort and happiness of one's fellow-men, and, last but not least, there should be pursuit of that which makes for physical health, even as the others make for intellectual and emotional well-being.

Health, wealth, and happiness for the individual; the quickened elimination of the ignorant, shiftless, discontented, and many of the dependent should be the results of an educative process in which a far-seeing economy asserts that beginnings are important; that the best must be provided at the time when the many can be reached, and, thru it, guarded from dropping into the ranks to which the doors of opportunity and advancement seldom open.

DISCUSSION

MARGARET GIDDINGS, supervisor of kindergartens and first grades, Denver, Colo.—Any discussion of the handwork of the kindergarten or primary grades must, it seems to me, deal rather with the use of materials than the selection of them, for there are certain materials which man, whether he be artist or artisan, has always used for means of expression. Froebel employed these for his so-called occupations and we are still using them in our modern kindergartens—plastic materials which may be molded or modeled, building materials, materials for wearing or sewing, paper, paints, and pencils. Are they not after all a heritage handed down from the experience of the race? And are they not as much ours to use with the children as they are man's to be used for his purposes of utility or decoration? When we begin to discuss the use of these age-old materials and undertake to adapt them to the needs of the kindergarten and primary grades, we enter upon a subject so broad that

it has not only entered the kindergarten ranks, but is bound to be a point of dissension as long as people have opinions and the power to express them.

The modifications, therefore, cannot come thru the arbitrary say-so of this person or that, but must be based upon a scientific knowledge of the powers and needs of the child during the different stages of his development—the same knowledge which should determine the selection of our stories, games, or play. The radicals among the kindergartners have in the last few years endeavored to modify the materials to accord with an increasing knowledge of children and their development, and while they have not always been successful in their attempts, they have certainly accomplished much which is most beneficial in the kindergarten cause. But there is still a long road for most of us to travel before we finally modify them to that degree of simplicity and crudeness which is right and proper for the handwork of children of kindergarten and first grades.

Dr. Brown spoke Thursday of the necessity of teaching man to stand alone, and I wondered then, as I have many times before, if we were fostering this as much as we should in our kindergartens. The only way to accomplish this, it seems to me, is to make all our work so simple, or in other words, keep it so well within the limited powers of the small child, that he can do it largely or entirely thru suggestion.

Of course, I realize that there is danger in this side too, for we must not only supply handwork but, to make it educational, we must provide for growth both in power of execution and in artistic appreciation, and a teacher must have good judgment as well as good training to insure this. Too often simplicity and crudeness, especially the latter, means to many teachers careless work and poor designs. Dr. MacVannel, in his scholarly paper before the International Kindergarten Union in April, made a fine suggestion when he urged that while we meet the child on the level of his instincts, interest, and abilities, we shall look to it that we raise him to higher levels of efficiency and power.

I believe that our games and play in the kindergarten need as much modification as our handwork. There is big work to be done here to bring them more within the real interest of young children. The playground people are preaching the necessity for using those games in which the children, the boys especially, are vitally and instinctively interested at the different stages of their development. How far do we follow this good counsel, do you think? I shall be glad also when we kindergarten people modify our kindergarten language; when we shall have dropped our term "occupations" and adopted that used by all the school people, be it handwork or construction work. It will be a big step toward our closer co-operation and unity.

I cannot close this discussion with a better statement than that made by Dr. MacVannel in the paper above referred to, "The Materials of the Kindergarten," in which he says that, "The true factors in kindergarten education are: (a) the spiritual culture of the race embodied in civilization; (b) the little children; (c) the teacher. In the largest and truest sense these three constitute the materials of the kindergarten."

This is a good thought to leave with you, but remember that on the part of the teacher knowledge, judgment, and wisdom in fullest measure must determine her ability and her success.

DEPARTMENT OF ELEMENTARY EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—JAMES F. CHAMBERLAIN, State Normal School, Los Angeles, Cal.

Vice-President—MISS ADELAIDE S. BAYLOR, superintendent of schools, Wabash, Ind.

Secretary—MISS NEPPA HOLLIDAY, principal of Longfellow Evening School, Denver, Colo.

FIRST SESSION.—TUESDAY AFTERNOON, JULY 6, 1909

The Department of Elementary Education met in Trinity Methodist Church at 2:30, the president of the department, James F. Chamberlain, presiding.

The session opened with a cycle of songs rendered by John C. Wilcox, of Denver.

The president's address dealt with "Progress and Needs in Elementary Education."

John W. Cook, president of the State Normal School, DeKalb, Ill., read a paper on the subject, "Does the Curriculum of the Elementary School Meet the Existing Needs?"

The discussion was opened by Walter R. Siders, superintendent of schools, Pocatello, Idaho, and was continued by Mrs. Ella Flagg Young, principal of the Chicago Normal School, Chicago, Ill.

The second paper of the afternoon, "How Can the Curriculum of the Elementary School Be Enriched?" was presented by Hervey B. Work, superintendent of schools, Wheeling, W. Va.

This paper was discussed by William M. Davidson, superintendent of schools, Omaha, Nebr., and John S. Welch, supervisor of grammar grades, Salt Lake City, Utah.

Upon motion, the president appointed the following committee on nominations:

R. J. Aley, Bloomington, Ind.

W. R. Siders, Pocatello, Idaho

S. L. Heeter, St. Paul, Minn.

SECOND SESSION.—THURSDAY AFTERNOON, JULY 8, 1909

The department met in the Trinity Methodist Church and was called to order by President James F. Chamberlain.

Otis B. Caldwell, associate professor of botany, The University of Chicago, presented a paper on "The Place and Practice of Nature-Study in the Elementary Grades."

The subject was then thrown open for general discussion.

The second paper of the afternoon, "Application of the Household Arts and Sciences to the Work of the Elementary Schools," was read by Mrs. Ellen H. Richards, of the Massachusetts Institute of Technology.

The discussion of this paper was opened by Miss Rosa Bouton, University of Nebraska Lincoln, Nebr., followed by Miss Berry of the State Normal School, DeKalb, Ill.

The report of the committee on nominations was as follows:

For *President*—T. A. Mott, superintendent of schools, Richmond, Ind.

For *Vice-President*—John A. Welch, supervisor of grammar grades, Salt Lake City, Utah.

For *Secretary*—Margaret Canty, supervisor of grammar grades, Milwaukee, Wis.

The report of the committee was on motion accepted, and the secretary was directed to cast the ballot for the election of the nominees. The ballot was so cast and the nominees were declared elected for the ensuing year.

After the introduction of the president-elect, T. A. Mott, the department adjourned.

NEPPA HOLLIDAY, *Secretary*

PAPERS AND DISCUSSIONS

PRESIDENT'S ADDRESS

PROGRESS AND NEEDS IN ELEMENTARY EDUCATION

JAMES F. CHAMBERLAIN, STATE NORMAL SCHOOL, LOS ANGELES, CAL.

We are living in an age of wonderful material development. The last century has witnessed greater changes than have occurred during all of the remainder of the period of recorded history. This well-known fact is of very great importance in its relations to our educational scheme. Specialization in every industry, changed methods of conducting business, new conditions attaching to home and community life, have made necessary new forms of training, new phases of knowledge.

Changes in our school system have not kept pace with those in the material world. Perhaps we sometimes forget that they cannot take place so rapidly. Wood, stone, and other materials can be fashioned at the will of the worker, according to his physical and intellectual power. These materials offer no intelligent response to the worker and no purposeful opposition. They have no receptive and no unreceptive moods. On the other hand, education is the result of striving and growth from within, as well as directed effort from without. This growth is determined, in large measure, by the attitude and mental capacity of the one being educated. There are certain functions belonging to education which are elemental. These apply to all times and to all peoples. In our rightful desire to bring about a more rapid adjustment between education and the affairs of life this should not be forgotten.

Very much that is said and written concerning the public school has as its keynote lack of adjustment to conditions under which we live. Whatever our work in the broad field of education, we are all earnestly striving to answer the question: How can the work of the school be made more practical, more effective, a greater power for good?

Upon the foundation depends the durability, the safety, the value of the superstructure. If, as we believe, education be the foundation upon which individual, community, and national life must be builded; if success, whether viewed from a material or from a moral point of view, rests upon this, then how important that this foundation be securely and wisely laid.

Elementary education is the stone upon which our whole educational structure rests. It is the opportunity offered by this division of the scheme of which the state says her citizens must avail themselves. Comparatively few of our people *do* take advantage of any other part of the system. If, then, the state has the right to demand of every child, as we all believe it has, an elementary education, it becomes the duty of the state to see that this education offers the largest possible opportunities. It must see to it that the school does its full duty in fitting the boy and the girl to become useful members of society.

That the school is *not* doing all that it can is a fact of which we are all painfully aware. Business men very often affirm that not only do the schools fail to provide the training which is essential to success in the world of affairs, but that a part of what the schools give is a positive hindrance to progress. This is a serious charge, and it should at least receive careful consideration.

In the days of our fathers a knowledge of reading, writing, and arithmetic more nearly met the needs of life than it does at the present time. Our population was then largely rural. When the children were taken out of school to help support the family they usually worked upon the farm, and a living at least could be secured. The conflict was with nature, not with man. The congestion of population in our great centers has wrought a marked change in economic affairs. Life under these conditions makes it absolutely necessary that the children of the poor shall, at an early age, become wage-earners. They enter the ranks of unskilled labor, they strive to become proficient in some trade, or they take part in mercantile or clerical life. There is a fierce competition of muscle with muscle, and mind with mind, and the number not equal to the struggle is appalling.

This makes it evident that preparing the pupil for life means far more than giving him a cultural training. That elementary education which does not make it possible for every boy and girl to acquire a training that shall be *directly* helpful to them in the great struggle to earn a living is not worthy of a place in our system.

But it is not on the vocational side alone that the elementary school is failing to do all in its power. Indirectly, at least, it often hampers the physical development of the child. Nothing can take the place of the proper amount of sunshine, fresh air, and exercise. We have no right to prevent the full expansion of the bodily powers of the pupil by confining him under unfavorable conditions in the educational cell composed of the school seat and desk. We are just beginning to learn how this reacts upon the mental and moral life to the detriment of both.

The keenness, alertness, discrimination, and judgment which have made possible the accumulation of vast fortunes in this country, were, in many cases, not acquired in the school, but rather on the street, in the store, or shop, in a constant struggle for supremacy. Interest and "aliveness" were born of desire, of necessity, and thus were skill and power developed. Too often our school exercises are not of the nature to call into play the full intellectual power of the pupil, and hence mental stagnation results.

In another, and this by far the most important way, our elementary schools fail to meet fully the needs of society. The rapidly changing industrial and social conditions require, more than ever before, dependableness, integrity, morality, character. The possibilities of the moral life exist in every child, but these possibilities are not likely to become actualities thru formal instruction along this line. The school must, as far as possible, surround the pupil by conditions that make for morality. There is a moral aspect attaching to

every thought and act. In the performance of every duty, no matter how small, pupils should be held to the highest plane of action. In every relationship of child with child, respect for the rights of others, sympathy, and high ideals should be inculcated.

The years that the child spends in the elementary school constitute the formative period of his life. What he is to become in later life is determined, in large measure, by what he is in school. Therefore, unless these years be spent in an atmosphere that encourages and demands the highest and noblest, the experiences of later years are sure to bring reproach upon the teacher and the school.

We know that conditions as they exist in the elementary school today do not always permit of proper physical development. We know that the school does not prepare the pupils to earn a living. We are still, to some extent, feeding dry husks to hungering minds, thus stunting intellectual life. Too frequently conditions do not develop high ideals and moral standards. What are we going to do about it? Custom, tradition, is one of the heaviest clogs which humanity drags from century to century. We should not hesitate to break away from educational practices that are time-honored if that be their chief claim to honor. Changes in the curriculum of the school should be inaugurated, however, as a result of thoughtful study, and in the firm belief that something better has been found—not on the spur of the moment and in the spirit of experimentation. With this animating our efforts, we shall certainly succeed, in the not-distant future, in bringing about a more complete adjustment between the work of the school and the actual affairs of life.

DOES THE CURRICULUM OF THE ELEMENTARY SCHOOL MEET THE EXISTING NEEDS?

JOHN W. COOK, PRESIDENT OF STATE NORMAL SCHOOL, DEKALB, ILL.

In order to give an intelligent answer to this question, two other questions must be considered: first, What are the existing needs? second, In what relation does the curriculum of the elementary school stand to these needs?

One of the functions of the elementary school is to prepare its pupils to engage most efficiently in the work of the secondary school. Rousseau's familiar remark that "the school is life rather than a preparation for life" contains a truth that will always need emphasis. But in that period of human experience that is essentially educative, one is not only living but is also preparing for more significant living. Because one aspect of truth has been so exaggerated as to be warped out of its proper relations it does not follow that, as a corrective, it should be so slighted as to be lost sight of altogether. He is a poor teacher who is so engaged with the present as to lose sight of the future. It may be answered that the best preparation for the future is to live up to the full measure of the present, but such an answer is but juggling with words;

the significance of anything is determined in large part by that to which it points.

There are certain studies that may be termed mainly instrumental. They are the tools with which the treasure-houses of knowledge are unlocked. Since the invention of the book, by which the limitations of time and space are surpassed, the ability to read has been a condition of any extended information. In the elementary school the larger part of the reading is for the purpose of learning how to read; in the secondary school it is assumed that this art has been acquired. It is henceforward to be used for the purposes for which it was mastered—for the acquisition of knowledge, or for some kindred object.

The curriculum makes ample provision for learning how to read. If the pupil who enters the high school is not a good reader it is not to be charged to the neglect of the course of study, so far as the quantity of reading-matter is concerned. The failure must lie in poor teaching or in the choice of material. I am often an unwilling witness of slow and stumbling reading in the upper grades of the elementary school. In the greater number of instances I have attributed it to the selection of material that is far too difficult for the pupils. In our desire to introduce the young to what we call superior literature we have put into the sixth, seventh, and eighth grades work that is suitable only for the second or third year of the high school. There is but one way to learn how to read and that is to read. The elementary school is not the place for hard reading lessons. The meaning must lie near the surface and must align itself with the experience of the child. It must be engaging and tempting and must thus invite to that constant practice which is the only method of so acquiring an art that it is forgotten in the enjoyment of what it yields.

Number is another of the instrumental subjects. Its mastery involves perfect familiarity with a large number of facts. Several hundred number combinations must take their places in the memory and in such a way as to be instantaneously available. There must be such an association of question and answer that the former immediately suggests the latter. We have come to regard drill as obnoxious to the child and consequently as hostile to the all-conquering doctrine of interest. There was never a greater mistake. Children love drill if properly conducted. They have not yet arrived at that stage of development in which reflection is the preferable employment. They can be so treated as to discourage memorizing effort and thus make it abhorrent. It is easier to guess at facts and call it thinking, and teachers often neglect to keep certain instincts alive and functional because it demands on their part a sort of work that does not feed their own intelligence.

Let the curriculum unhesitatingly face the necessities of certain subjects and provide the kind of work that they demand for their free mastery. The word "mechanical" is feared by many teachers as the children dread the "bogy man." The central idea is all right but the error lies in throwing an indispensable thing away because it has been abused. I do not forget that habit is the vanishing point of education, nor do I forget that certain habits

are necessary in order that education in other directions may proceed. Let us so far return to the customs of the fathers as to provide for a sufficient amount of drill to make mechanical that which is at best poor in thought content, but which leaves one crippled and inefficient if not thoroly mastered.

Is the transition from the elementary school to the high school too abrupt? A study of high-school data shows the greatest falling off in the first year. Possibly the statistics were too limited in their scope to furnish a reliable judgment. They were suggestive of the idea that the pupils became disheartened because of the unexpected rigors of the new work. That there should be a conscious entrance into a new realm I believe to be capable of demonstration. Life not only seeks to be rhythmical but also to be epochal. It is well worth while to make the transfer to the high school an event worth remembering. The change comes when the novel is especially welcome. Will some student, with the time and inclination, make a study of boys and girls with respect to their view of the world within the last three months of the elementary school and the end of the first three months of the high school? It is doubtful whether any other similar period will exhibit so marked a transformation. But it is easy to make the promotion the leaping of a chasm. There are no chasms to be leaped in the educational process. We must be able to run back as well as forward. The elementary school should anticipate the high school by dropping here and there into the curriculum that which will sprout ideas that become explicit in the later period. An appreciation of the doctrine of apperception will lead us to provide specific ideas for the interpretation of high-school subjects. It is not forgotten that much the smaller half—to use a Hibernicism—never reach the high school. So much the greater need. Let not their appetites for more be neglected because the chances are against their getting it. Enough has been said to furnish a ground of criticism against the present curriculum in that it does not sufficiently look to the school beyond, or to the life independent of the school beyond.

Let us return to the curriculum and examine it with reference to another feature of the existing needs.

What shall we say of it as an adaptation of employments for educative purposes to the needs of the child himself, in the several stages which he enters from the sixth to the fourteenth year?

In many respects it has embodied the best intelligence of a large number of men and women who were freed from the authority of tradition and who were fearlessly seeking the best available experience for children. I ought to have said in most respects. In spite of all that the free lances, in their irresponsibility, are saying, the curriculum in the great majority of schools is the best thus far realized, and that is by no means small praise.

Pestalozzi summed up the whole science of pedagogy in three propositions:

1. There is a natural order of development in the evolution of the mind of the child.
2. There are employments exactly suited to the needs of the child in each of these successive stages of his development.

3. It is the office of the teacher to discover this natural order, the employments best suited to occupy him at each of these periods of growth, and to put the two conceptions into vital relations.

There has been an honest effort to follow the lead of the Swiss reformer. Our greatest trouble is with the earliest grades. I do not mean that we have our main troubles there with the children but with a certain class of parents. Realizing the economic value of the child on one hand, and the compulsory school law on the other, many regard as frills and fads all attempts to devote the first two or three years of the school to a free and generous life. The call for work from the beginning that shall tell directly and immediately upon the bread-winning problem is heard on every hand. As against this call of the child to the mills of toil, hear what a noble-hearted woman, who has spent thirty years of her gracious life with little children, has to say:

Too much is now expected of children the first year. They should be allowed a year and a half to do what is now expected of them in one, especially in reading, writing, and number. Much more time should be devoted to games, songs, poems, stories, and kindred occupations. It would be better to put off the reading and writing until the middle of the first year, or at least until the second term. Construction work should occupy more of the time of the children during the first three years. It should be largely carried on with materials which the child will find in his home and he should be especially encouraged to do at home what he does in the school, thus prolonging the educative activities of the day and enlisting the interest of his brothers and sisters. The possibilities in this direction are not appreciated by teachers generally.

In construction work the dictation should be reduced to the minimum, and the children should be encouraged in all ways to think themselves out of their difficulties. The child should constantly be urged to notice what is going on about him out-of-doors. Industrial activities should be studied, natural phenomena should be observed, the common life that is all about the child should be made an open book for him to read. He should not be aided at every turn but should be left to his own resources as much as possible. We button his coat and put on his rubbers and give him his pencil and open his book and cultivate in him constantly the spirit of dependence, because we love him and seem to want to keep him a child.

Perhaps it will be answered that these are not matters for which the curriculum is responsible, but are the results of the cultivation of that newer spirit of humanity that came in with the reformers. But the curriculum may be modified in these earlier grades so that there shall be an intensifying of all of these particulars suggested in the way of constructive work and the consequent relief for which this teacher pleads. Thus the school will become more and more a place in which the free and spontaneous life of the child takes the place of the conventional occupations that seem so foreign to his experience.

I confess myself in warm sympathy with these suggestions. They touch a responsive chord in all of our hearts. But it is being forced upon us that the school must be relied upon to relieve the social tension so apparent in many directions. We are continuing the urbanizing process with unabated vigor. In consequence, the industrial man of the city is like a soldier in his garrison to whom supplies must come from a distant base of operation. He

lives from hand to mouth and is in constant menace of a panic or a strike or of a cessation of his daily labor from some other cause. The young must expect to help in the family support as soon as possible. They must be imbued with habits of industry, must acquire notions of frugality, and must be started along a line of manual occupations that make constant appeals to the exercise of high intelligence. They must see that schooling is the means by which they are to get a leverage on the world. When the boy or the girl feels that every day in the schoolroom yields an increment of power that makes him more desirable in the eyes of employers, he is getting from the school what he has a right to claim. It is useless for us to cling longer to our old ideals without recognizing the mighty changes that the industrial revolution has wrought within the last few years. The day of the common laborer is drawing to its close, at least in the great majority of occupations. "How many common laborers are there in this mill?" I asked of the courteous foreman who was showing me about a great mill. "There are no common laborers in this mill," was his reply. "All are skilled workmen. The derricks have taken the place of the others."

And how is the curriculum to be modified to meet the existing needs? In many ways, I am confident. It must be so changed that the school may still keep its hands upon the boys and girls that have left at the end of the eighth grade, or earlier, if the compulsory law has permitted it. Of all of the suggested plans the one put into operation in Rochester a few months ago seems to me the most suggestive and the most promising of good results. In effect it begins the specializing process quite early in the grades. It makes a study of every boy and endeavors to do the very best thing possible, so far as human sagacity can discover the best thing for him. It regards the probable demands that will be made upon him in the industrial life that he will be most likely to enter.

It is quite probable that many of you have read the pamphlet issued by the New York State Education Department on April 1, of the present year. It is *A Description of Rochester Factory Schools*. These schools are the result of an investigation of industrial needs in that city. The superintendents and foremen were asked to testify as to the deficiencies shown by the boys who sought employment under their direction. This was seeking expert testimony. "What can you suggest in the form of manual or mental training" they were asked, "that will increase the earning power of these boys and make their promotion more rapid?" They replied and those replies were made the basis of action. The board furnished the equipment and the factory schools were launched. It is interesting to read the list of the teachers. It sounds more like a faculty list in a polytechnic school than the names of a corp of grammar-school teachers in a city school.

Do the opening sentences of this paper conflict with the closing? I can see that they do. Preparation for further schooling is as necessary as preparation for vocation, for life should always be a school.

Does the curriculum of the elementary school meet the existing needs? No. What is to be done with it? It is to be changed. How? In whatever way is necessary to meet the conditions brought about by the industrial revolution. What about the cost? It is to be materially increased. Will the people stand it? They will demand it.

DISCUSSION

WALTER R. SIDERS, superintendent of schools, Pocatello, Idaho.—I find myself in accord with the paper, and am desirous of adding emphasis to a few points. If "education is but a phase of the social movement of the race," the answer to the question of the topic is to be found in a study of the social movement of the race.

It is not questioned that this is an industrial age; that material achievements and the applied arts of the industries command the attention and are the means of livelihood of the great majority of our people. The raising of food stuffs and the mining and production of raw materials are being put on a scientific basis. Machinery and scientific methods are being applied to the mine, to the forest, to the farm, and to the field in almost the same degree in which they are applied to manufacturing.

The learning of trades and the applied arts by the apprentice system is largely a thing of the past. Specialization prevents the apprentice from learning the whole of a business, trade, or applied art. The apprentice is cut off from higher usefulness because the specialized system of his apprenticeship does not afford the necessary comprehensive view.

As the reader of the paper has said, the majority of children are compelled to become wage-earners at the close of the elementary-school period, or sooner if compulsory education laws will permit.

Does the elementary-school curriculum recognize this? Does it fit for a basic comprehension of agriculture, of the trades, or of the applied arts?

The elementary school should supply what the old apprentice system afforded and give this training from a more scientific and comprehensive viewpoint. Manual training and domestic economy are but a beginning. Something similar to the Rochester factory schools will be demanded.

Education is not solely for ulterior purposes. The cultural side of education must not be overlooked. One of the important functions of elementary education is to increase the happiness and civic usefulness of the individual. The curriculum, as it stands today, has the cultural side better cared for than the vocational side of education. A further enrichment of the curriculum must be made with a view to making better the cultural aspect.

The vocational feature will be new in the curriculum, but what of the curriculum as it stands? Does it meet the existing needs?

As has been pointed out, the elementary school affords the tools necessary to acquire knowledge, the subjects taught are a means to an end. The needs of the age are the ends in view. The ends attained by the elementary-school graduate do not seem to measure up to the needs of the age. The ends attained by the elementary-school graduate do not justify the means used in preparation. The faults are in subject-matter as well as in method.

In so far as reading fails to train to a ready comprehension of what is read, and both oral expression and interpretation are faulty; in so far as writing passes beyond legibility and rapidity to ornamentation and flourish; in so far as arithmetic is laden with problems and computations of a past age, and fails in accuracy and facility; in so far as geography is confined to obsolete information, to the indentations of obscure coast-lines, to the rising and direction of flow of unimportant rivers, etc., instead of scientific reasons for geographical phenomena and valuable commercial information; in so far as grammar and language training is confined to intellectual gymnastics in parsing and analysis of classics which

challenge the understanding of adults, instead of training for fluency and accuracy in language as an instrument for ready communication; in so far as history glorifies war and is silent on the achievements of peace; in so far as manual training and domestic science are slop-work and not shop-work, not contributing to definiteness of knowledge and exactness in results; in so far as any or all of the work of the curriculum does not give modern information, does not drill this absolutely into the individual until it is a reflex part of his make-up, does not fit him to understand the elementary problems of making his livelihood, does not instill patriotism, altruism, and an intelligent appreciation of our government: to that degree the curriculum does not meet existing needs.

A survey of the needs of the age reveals that the present course of study is very considerably inadequate to meeting these needs.

HOW CAN THE CURRICULUM OF THE ELEMENTARY SCHOOL BE ENRICHED?

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The necessity for any enrichment of the course of study must lie in a present insufficiency in its organization to supply what is needed to educate the child properly. The purpose of enrichment, then, is to supply what may be lacking to make education a more effective force in preparing the pupil for life.

The course of study may be defective from any one or more of a number of reasons. It may be that it has not been developed as rapidly as the changing thought of the people would require; or that it has been constructed with reference to certain conditions of our time, while it has neglected others equally important; or that it has been shaped to attain but a partial end of education, rather than the whole. In any event, the discussion must be the same. The whole purpose of education is to be attained, and the point for consideration is: how to adjust the course of study, both as a whole and in its parts, so as to attain in each case the maximum result.

The necessity for enrichment being assumed, the problem becomes one of method. How shall we proceed to enrich the course of study? We know that we want to do it; can we find the means? Can the present curriculum be changed or modified in any way so as to produce the result sought, or must we alter it fundamentally?

The idea implied in the phrase, "enrichment of the course of study," is that the course of study lacks something which it ought to have, and that whatever it is that is lacking can, in some manner, be incorporated into it. Enrichment implies the placing in the course of that which will make it better adapted to its purpose.

Now the present curriculum may not have content enough, or it may have too much in some lines, and not sufficient in others. Hence, we may enrich by addition, by subtraction, by both, or by substitution. Enrichment implies change. It is an attempt to supply what is wanting; to work a change by putting new subject-matter into the course so as to make it more vital. The

entire question of enrichment involves the purpose of education, selection of means to attain that purpose, and the adaptation of the means chosen.

What we have heretofore attempted by way of enrichment has been chiefly by addition to the original course of the three R's. We have added without unifying. We have filled up the years of the child's school life with a multitude of subjects until the course of study is so congested that we are seeking means of relief from its overcrowded condition. Is it the case, then, that our further discussion of enrichment must be regarded as a protest against the present curriculum, a protest which cannot be met by any system of addition or elimination, but must be answered by substituting a new course of study written with entire disregard to the present course, but with reference solely to the nature of the child and the need he has for education?

What the child needs is development in relation to the best in his environment. As a physical being he must provide for his physical wants, and this means, in most cases, that he must be a manual worker; as an intellectual being his intelligence must be trained to do its best work under any and all conditions, and this implies mental discipline; as a moral being his feelings and emotions must be aroused and stimulated, right choice encouraged, and the will to do right strengthened; as a spiritual being, realizing his dependence upon a Divine Being, and drawing his highest incentives in all things from a desire to please the Creator and Preserver of his life, his religious nature should have full development.

Now, these are the relations which obtain in the life of each of us. Ideal education would aim at the highest possible development of the individual in each of them; practical education aims at getting the best out of each, but does not place the same emphasis on all. Practical education views man in his present relations, and seeks to give him a training that will make him most effective in whatever he may do, here and now. The schools have mainly to do with practical education. Their aim is character, or citizenship, or social efficiency, or whatever you may choose to call it. Manual, intellectual, and moral ability are direct aims of the school; and spiritual power is an aim only as it contributes to the perfecting of the other three.

If the previous statement be true, then the problem of the development of the course of study is so to select and arrange the subjects of study as to include those things that will most effectively contribute to the end in view; and the problem of enrichment is so to select and limit their contents as to accomplish that end and no other. As for myself, I do not believe that further enrichment will come so much from additions to the course as it will from a rewriting of the textbooks, so as to include in them for educative purposes only live material. When, for example, we shall cease to view arithmetic as a branch of mathematics, to be studied as a science in itself, but shall regard a knowledge of it as a part of the equipment of the efficient man, and shall include in our school work only such of its principles and processes as may be necessary to accomplish that end, we shall have made one great step toward

proper enrichment. The same remark applies to the various other subjects included in the curriculum. We need elimination first that we may have enrichment.

It should be borne in mind that enrichment of the course of study has a parallel proposition, that is, enrichment of teaching. The whole problem involves these two things. The one is as important as the other. The best course of study in the world will be of little avail if it cannot be enriched by the knowledge, the life, the experience, and the inspiration of the teacher. Inspiration, guidance, and outlook ought to be the teacher's main contribution to the work of educating the child. The opportunities to offer these are ever at hand. The pupil can gather facts from a great many sources—the teacher is not necessary for that; but he is necessary to the novice in discovering the relation of the facts and the beautiful harmony that exists in all truth. The only advantage which Mark Hopkins, seated on one end of a log, could have over the student on the other was in the richness of his experience, and his training in discovering the relation and interpretation of facts. The same facts were about them both on every hand; study and experience had trained the one to recognize relation; the other was being trained. The guidance of the more experienced would be of great value to the one of less experience.

Great teachers always excel courses of study. So far as we know, Socrates had no course of study, nor had the Great Teacher, but both grasped the true spirit of teaching, and it was the life they put into it that made them the greatest teachers of the world. They were concerned with the things of life, and their teaching took on the form of thought with which they were concerned. They put into their teaching what they got out of life, and that made life more abundant for their fellow-men. *The enrichment of teaching is as highly important as the enrichment of the course of study.*

To enrich our courses of study, then, we need to put into them the things which will attain the fullest measure of the end that we are seeking. If we are seeking the upright and perfect man, we must put into the content of our studies the things which will educe those qualities which we understand as going to form the upright and perfect man. If we want to make an artist of him, in addition to having him upright and perfect, we must include those things which are competent to evolve the artistic nature within him. Stating the principle again, for the purpose of emphasis, the object sought in enrichment, in any line of school work, is more definite relation to the range of our daily-life experiences. And the natural process of enrichment—the very natural process—is the inclusion of such content in our studies as will most effectively produce that result.

With regard to what should be included in the course of study, I would make the following observations:

1. There ought to be, in order to construct a proper course of study, a general agreement as to what education is to do. So long as we are divided as to

the ends which education is to obtain, one urging one thing, and another something different, so long will the question of enrichment be unsettled; for what would serve for enrichment in one man's estimation would be useless according to the other. We need to get together on the purposes of education.

2. The time limit for direct instruction will require further readjustment of the present course. As the course is now planned to occupy the full time of the pupil, to enrich by the addition of any new material will require the elimination of something already in the course. This has been the principle pursued to a large extent in all efforts at enrichment so far attempted. The time limit is the inexorable factor of the whole thing. The real question is, how much can we do in the time that we have. Could that limit be removed,

Could we be secure
That our lives would endure
For a thousand long years, as of old,

then we could put into the course of study all that we might desire. Perhaps when we secure that extension of life which the scientists tell us is coming, and the normal period of living is six score years instead of three score and ten, we can lengthen the period of infancy correspondingly, and so provide to the full extent that training which seems so necessary to call forth in the child the qualities of heart, head, and hand which tend to make him a fully developed being of his kind. But we must accomplish the work within definite time limits.

3. To my mind, in order to secure the proper enrichment of the school course we shall have to rewrite it in terms of life instead of in the terms of special subjects. We are beginning to make progress in this direction.

Every act of study ought to leave a twofold result: (1) an item of knowledge, be it a fact or principle, which is in itself worth knowing at that time; (2) an increased power to repeat the same, or a like, act of knowing. These are the primary results. Other results may follow because acts of knowing frequently arouse feeling and willing. Intellectual activities are rarely simple things.

The material which goes into the course of study ought to meet these conditions:

1. It ought to be better adapted than any other material to secure the desired results. This implies the most careful selection of all material with reference to its worth, or educational value.

2. It must be chosen with reference to the pupil's ability to comprehend it. The mental ability of the child must condition the choice. There must be the fitness of time when the pupil shall undertake such work as is proposed. Here is implied, too, the proper sequence of material. The arrangement of the work must provide for continuity of subjects.

3. The subject-matter should be chosen with reference to its interest for the child. It ought to combine, if possible, inherent interest together with the quality of utility for future activity, or acquirement.

4. It ought to be chosen with reference to its power to satisfy a real present need. Many things prove interesting which have no other special merit. Out of the vast wealth

of material available that selection should be made that will best and most quickly put the pupil *en rapport* with the best in his environment. Whatever else education does for the child, it should cause him to understand the activities of his own place and time, and prepare him to do his part in them.

5. As far as possible, the subject-matter of the course of study should be such that the child will have a conscious motive for taking it up. This is, perhaps, but another way of saying that we should omit all that is abstract or merely formal. As much as may be, the material for study should be concrete.

6. The material of the course of study should be chosen with special reference to unity and correlation. We are a people of analytic minds. We love to divide and classify. We emphasize the value of each idea and develop it into a special subject which we would have taught in the schools. We must seek to unify and concentrate. Time and results both demand this.

These principles do not conform to the idea of formal discipline; nor do they disregard it further than this, that for the means of mental discipline they would substitute such knowledge as is immediately valuable to the pupil. They would require us to choose for mental food only those facts which are of immediate interest both in themselves and in their anticipation of other forms of knowledge.

The old question of the relative value of subjects as disciplinary factors needs no discussion here. The fact stands that when the mind is interested in any subject, thinking results; if it is not interested, thinking may still result, but it will not take the direction desired. Thinking is incited by those things which interest the mind; hence the more things which can be included in the course of study, which appeal directly to the pupil's right interests, the greater will be the amount of thinking caused, and, necessarily, the greater the intellectual power developed. For the purpose of arousing the interest of the child, the concrete is vastly more valuable than the abstract.

In putting this emphasis upon the condition of interest, it is not to be interpreted as excluding certain exercises in drill work, as in number, in reading, in spelling, etc.

There will be a certain amount of drudgery in acquiring the mechanics of study which cannot be avoided. The child may not be able to see anything in this work that is of immediate interest to him. We must explain as best we may and encourage, but that is as far as we can go. For the rest we must depend upon indirect interest and the spirit of obedience. The child must assume that we will not require him to undertake any work for which we have not good reason. He comes to us as a child, with a child's motives and a child's abilities, and we must put ourselves on his plane at the beginning, but we must bring him to our plane at the end. And our plane is in the world of things, the world of activity, the world of life, as we say.

In the past twenty-five years we have incorporated art, music, literature, history, manual training, domestic science, and business practice. In the courses which we now have there is material for the discipline of the intellect, the training of the hand, and the instruction of the heart. We do not need more material, so far as the number of subjects is concerned, but we need such

content in the subject-matter as will produce the highest results. And this, as I see things, is the way by which further enrichment will come.

THE PLACE AND PRACTICE OF NATURE-STUDY IN THE ELEMENTARY SCHOOL

OTIS W. CALDWELL, THE UNIVERSITY OF CHICAGO, CHICAGO, ILL.

The place and practice of nature-study is to be determined by the benefits that are expected to result therefrom. These benefits may be stated with but a measure of assurance, since experience in using nature-study materials has been so divergent that differing values are assigned. Sympathetic comparison of results of these experiments will doubtless assist in defining the purposes that we may reasonably expect to realize in and thru nature-study, but until this is done more thoroly, argument relative to realizable purposes must be somewhat tentative. This need not suggest discouragement, since persistence of experiment and of real nature-study enthusiasm is ample evidence of the genuine educational vitality of the subject.

This vitality of nature-study in elementary education is probably due to an almost universal inherent interest in nature and an inherent investigative attitude of mind on the part of children; and on the part of teachers, a somewhat general belief in nature-study: (1) as a means of continuing and rendering more efficient this investigative attitude of mind so that thinking may be more direct, comprehensive, and dependable and may be exercised upon something that seems worth while; (2) as a means of concrete experience and first-hand problem-solving which are essential to the enrichment of one's own activities and essential to interpretation of the thoughts and actions of others; (3) as a means of a larger and more constant enjoyment of nature; (4) as a means of proper understanding of nature in relation to man's own problems—industrial, social, and economic. Children bring this nature interest with them when first they come to school, and in it the teacher may find the mainspring of many important activities. It is the starting-point in the teacher's development of the other educational benefits just mentioned. Furthermore, this interest has to do with materials that must be encountered in the world's work, and thus it possesses the great value of education in connection with some of the things with which the children and adults must deal. If education is for efficiency in social and industrial life, it would seem that education in and thru the life processes of plants and animals and the materials and processes of the earth upon which life depends is most logical. Also, if education is to develop high types of intellectual and ethical men, it would seem well that the children learn early, in a practical way, such natural laws as the law of cause and effect in order that they may not unwisely depend upon "side-stepping" the results of causes that they have set to work. The inhibiting influence of a working knowledge of cause and effect is a possible and often

a real outcome of work in nature-study. There is no more economic result from nature-study than the proper method of thinking.

Nature-study has a large place in elementary industrial education, since many of its materials and methods of work enter into our most important and instructive industries. If the bases of general industrial life are well laid in nature-study and other elementary subjects that deal therewith, we shall have the proper beginning of industrial education, and shall save both our present school system and proposed elementary trade schools serious error.

The order of procedure in nature-study, considered independent of method of presentation, which we do not attempt to cover in this discussion, seems to me to be determined largely by two things: (1) the predominant interests of children of the classes in question; and (2) the materials available within the immediate environment.

In grades one and two and possibly in grade three the dominant interest is in knowing what things are, and what they are doing, comparatively little interest being had in how processes are working. Consequently it follows that in these lower grades the end sought should be intelligent first-hand contact with nature for general acquaintance. The work may include factors such as observation and very general study of plants and animals, their names, their homes, the habits of old and young; the foods we eat, their sources, the native plants and animals that furnished foods to primitive peoples; streams, hills, valleys, lakes, rocks, action of water; group gardens for entire grade, and plants in window-boxes; insects of garden and field; the toad and his habits; simple word or pencil description.

In grades four (possibly three) to six, the interests of earlier years are not lost, but there develops intense interest in how things are being accomplished. Desire for control and ownership of nature's materials becomes prominent; interest in the human body is strong. Hence in these grades more intensive studies are most useful, such as life cycles of insects, of birds, of plant life, and processes involved in growth of economic and wild plants; insect enemies of plant life, birds, and agriculture, the individual plot in the school garden with its personal ownership and its related nature and industrial interests. This general study of plants and animals leads naturally to a study of general human physiology and personal and group hygiene which comes efficiently into the sixth grade in many schools.

In the seventh and eighth grades interest in the preceding is retained but it now broadens into the larger features of nature—physical, chemical, and physiographic forces, but not as separate sciences, the larger industrial aspects of the earth and of plants and animals. Problems such as may arise in the home, in the community and in the industries are highly attractive; the origin and history of the domestication of economic plants and animals, the forests and forest influences, the lumber industry, paper industry, fiber industry, plant processes and the world's food, simple chemical experiments, simple machines, electrical phenomena and apparatus, heat, combustion, steam;

water power, applied physics, chemistry and biology of the home and community.

Such a study of nature should better fit pupils to enjoy themselves, to be better, to go on with separate sciences, if such is to be done, in a meaningful way, and in any event better to use their abilities in doing whatever may be their part in the world's work.

APPLICATION OF THE HOUSEHOLD ARTS AND SCIENCES IN THE ELEMENTARY SCHOOLS

ELLEN H. RICHARDS, MASSACHUSETTS INSTITUTE OF TECHNOLOGY, BOSTON,
MASS.

The earlier conditions cannot be restored, not even the home training can be brought back, except on the farm and that, it is hoped, may be revived. The city or suburban children cannot have the opportunity to pick up chips when too young to bring in wood; cannot stand by and hold skeins of yarn, or go to the barn and help feed the calves—all most interesting and provocative of endless questions. They cannot go into the garden and pick berries or pears for dinner, learn how to avoid breaking the vines or how to judge the ripeness of the melons.

All that is probably impossible for many, because it is not possible to give children of this age responsibility without oversight, and today's elders are loath and often incapable of giving oversight.

But while these circumstances over which apparently we have no control preclude much of the valuable outdoor work, food has still to be prepared, dishes need washing, and clothes must be mended, even if towels and napkins are no longer hemmed by hand. Rooms are still swept and dusted, beds are made, and chairs and tables put straight. If the wise mother only realized the value to the child of helping in such portions as are not too heavy, of being a part of the life, she would let nothing stand in the way of using this natural means of development. But with foreign domestics whose idea is to get the various duties over as soon as possible, and whose gift is not that of teaching, how is the child to grow into the normal ways of right daily living, unconsciously and effectively?

If the parents continue to throw all the work of education on the school, then the school must take the best means of fulfilling the task. Has any better means ever been devised than the small daily tasks which differentiate men from animals? The care of the fixed habitation, the foresight needed to prepare the things for the family life in the weeks and months to come, the co-operation of all the members of the family toward one common end—all tend toward high *human ideals*.

How shall these ends be gained artificially by devices of the school? For gained they must be, if civilization is to be maintained.

To quote from Miss Bevier:

The home is so inseparably connected with the house, and our comfort and efficiency are so greatly influenced by the kind of houses in which we live, much of interest and importance centers in the study of the house.

Moreover with the house, its evolution, decoration, and care may be associated much that is interesting in history, art, and architecture, as well as much that has a direct bearing on the daily life of the individual.

The philosophers have struggled for centuries, each contributing, according to his experience and vision, what was the purpose of life. America's thought could be translated into the word efficiency. Yes, we might almost say she worships efficiency. If, then, efficiency is to be the goal, what are the means to develop it? Efficiency depends mostly on good health, and to maintain this we must first consider the physical aids—food, air, water, clothing and shelter, exercise and rest—and with this goal in view, must come also recreation, play or amusement, and beauty to develop the mental and the spiritual. In relating our scheme of work to this little house we will consider first the shelter.

The school has drawn the child away from the home. The school of today demands much more from him than the school of the early New England days. It has taken the time that was formerly given to assisting in the duties of the household; it has taken from the home the interest and responsibility that were developed thru the co-operation in the family life. School has taken the place of home in the child's thoughts. In the morning the thought is of reaching school, not of the home duties that could lighten many a mother's burden.

The school, hurried with a curriculum that is wasteful of time and energy, lacking correlation in the studies, except in a few schools which are noted exceptions proving the rule, has little time to relate its work to the home as the kindergarten does in its morning talk; so there must come an intermediate step in order that the school may emphasize the home life and industries, and that a generation may grow up who shall have a knowledge of the daily needs of life.

The interest awakened in the school will surely react upon the home. It is like an expedition going out to make new discoveries to bring back the knowledge to their own land. The directive work of the school will thus become a practical realization in the home. Then the cycle will be complete, for while the school has separated the child from his natural environment for many more hours and weeks, it is sending him back better equipped thru knowledge and experience to fulfill his place there.

Thru what means shall we realize this. The children of ten or twelve years of age have passed the "make-believe" stage of play; they want the "real," but of their own kind and age. The little children have made and played with toys and foreshadowed the needs of the actual home—now the time is here for the youth to have his demands, which are not yet the demands of man and manhood.

At the recent Tuberculosis Congress a sanatorium in England won a prize, and among the many good features presented was the graded system of work and the graded tools, beginning with almost child-like ones for the weak and unskilled, gradually advancing toward the normal as the strength and health of the man grew; and so it should be with the material we should give the children.

After the toy stage a house about two-thirds the ordinary sized house may be constructed. A room seven feet square is very livable for a child. Three rooms is a very good working plant—the kitchen and the bedroom, the dining- and living-room combined. Both boys and girls may co-operate in planning, building, and furnishing this home.

The plan of a modern house may be drawn, basing it on the knowledge of house architecture thru history, the modification necessary to site thru geography, and the knowledge that science has brought in drainage, ventilation, and construction. The house could be built by the manual-training class, or if that is not feasible it may be built by one of the firms making portable houses. At all events it can be painted by the children, and this will lead to lessons on color, the use of paint and its composition.

While the "shelter" is being constructed the child must be considering at the same time the principles of caring for the home, for this would naturally influence the thought of furnishing. The simply furnished home means less physical exertion, but not less beauty. The home planned and executed on scientific principles of hygiene and sanitation means a healthful home, a much cleaner home.

The shelter of the individual has been considered, now comes the immediate protection of the child—its clothing. It would not be quite practical in this little home to enter into the personal activities of bathing and dressing. A very large doll approximating the child may be used, one large enough so that it can wear boots, stockings, etc., that are usually bought for the real child. And here can be taught the lesson in wise spending.

The right care of the body must be included among the necessities of education. The teaching of the principles of hygiene should be closely related to the lives of the children. Correct habits, not rules, are the proper prevention for all sorts of defects. To secure and maintain a healthy body, habits of cleanliness and enthusiasm for health must be inculcated. Such habits can be readily impressed on the body while it is plastic in growing—that is, while it is young—but they are acquired only with difficulty and by much thought in after years. Hence there is the greatest economy of time and energy in accustoming young people to habits of daily living which will give them the best chance in after life—the chance to be "healthy, happy, efficient human beings." Most of the teaching must be by indirect methods—illustrations—and so the doll may be used again to demonstrate and relate facts about the daily life.

An old Scotch writer once said, "He that would be good must be happy,

and he that would be happy must be healthy." The great increase of disease from causes under individual control, such as that which is brought on by errors of diet, points to a need for a more general education in this respect. The food problem is fundamental to the welfare of the race. Society, to protect itself, must take cognizance of the questions of food and nutrition. It is necessary to give the child the right ideas on these subjects, for only then will there be sufficient effort to get the right kind of food and to have it clean. Right living goes farther and demands the right manner of serving and eating the food. The home table should be the school of good manners and of good food-habits of which the child ought not to be deprived.

If all the foregoing principles have been developed, if the child has been led to see the joy of living thru these home activities, he will consider the home the true shelter, the place where he can play happiest, rest easiest, study most earnestly, and express himself most honestly.

Home economics stands for: (1) the ideal home life for today unhampered by the traditions of the past; (2) the utilization of all the resources of modern science to improve the home life; (3) the freedom of the home from the dominance of commercial interests and their due subordination to ideals; and (4) the simplicity in material surroundings which will most free the spirit for the more important and permanent interests of the home and of society.

DISCUSSION

MISS ROSA BOUTON, University of Nebraska, Lincoln, Nebr.—That an application of the household arts and sciences to the elementary schools is greatly needed at the present time is evident to all who give the matter careful thought.

In the poorer districts of our great cities, in the highlands of the South, and in the rural districts of the Middle West are many people who have not had the training in household arts given our grandparents in old New England. Many of these people are incapable of properly performing the duties of the home, and therefore cannot give their children the training necessary to make them efficient home managers. Furthermore, conditions have so changed that educated well-to-do people give their children very little training in the performance of home duties. Today the sons and daughters of many wealthy and educated people are little better off than the poor and ignorant, so far as actual efficiency in the care of themselves and their homes is concerned.

The introduction of household arts and sciences into the schools is especially to be desired because these subjects not only train the mind, but also the hand, to perform skillfully all kinds of domestic duties. At the same time they give useful information concerning all things that have to do with the home, and may accordingly be co-ordinated with almost every branch now taught in the schools.

The children find real pleasure in doing the mechanical things, and if the teacher be wise in directing the efforts of the pupils, very excellent results may be secured in material things, in addition to the training of mind and hand for future work.

Children can acquire skill in manipulation much more quickly than older people. For instance, girls in the eighth grade can learn to mold bread or handle the needle properly with much less effort than must be expended by the college young woman in acquiring the same degree of proficiency. It is therefore a matter of economy of actual time expended to give this training to children in the elementary schools. Another factor to be considered is that each hour of the college student's time is of greater economic value than that of the pupil in the elementary school.

Statistics show that the majority of children do not continue in school beyond the eighth grade. Hence the great necessity of applying the household arts and sciences to the elementary schools in order that the greatest number be reached. Not only are the hands and the minds of the children trained, but their homes are improved, for into these homes there passes the influence of skillful manipulation and economy of time, strength, and material resources. Into the homes also go the higher ideals which the children have gained, together with a new realization of the dignity of manual labor and a respect for all the work necessary to make the home comfortable and each member of the family well and happy.

The plan for applying the household arts and sciences to the elementary schools as outlined by Mrs. Richards seems to me admirable. It includes not only instruction in cooking and sewing, but the planning, building, finishing, and equipping of the house. It also provides for training in the care of the individual and the house, the management of general housework, and domestic financiering. The plan seems ideal and I heartily wish it might be made real in the elementary schools of our land.

There are two conditions absolutely necessary if the plan as outlined be made practical in any school: one is the securing of a teacher who has training, adaptability, and wisdom enough so to plan and execute the work as to make it effective; the other is sufficient finances to make the building or the buying of the house possible.

To make the plan a success, practically each child must have definite things to do at such times as will not interfere with other school work. The efforts of the pupils must be so directed that the results will be satisfactory to themselves and to their parents, and command the respect of people generally. Where instruction is to be given to large numbers, the arrangements of the time schedule would seem to be a difficult matter unless the work be given largely by lecture and demonstration with only a small number working at one time. For instance, it would be a difficult problem to arrange for twenty or thirty different pupils each to have an opportunity to help in the painting of the house or the finishing of the floor. It is not an easy matter to train careless children to work neatly and with exactness. To have the plan a success the work must be most carefully done and must accordingly have close supervision.

In many communities public opinion has not yet been educated to demand a sufficient expenditure to secure the requisite number of instructors to give as close supervision as should be required where large numbers of pupils are to be trained. Neither are sufficient means available for the purchase of equipment and working materials.

In such places this plan cannot at once be worked out in its completeness, but a beginning may be made in the introduction of some of the work with very little or no equipment. For instance, definite recipes with detailed directions for work may be given by the teacher in schools where no equipment has been secured. The pupils may do the cooking at home and report results to the teacher, and when practical bring some of the cooked food for criticism. I know of communities in which this plan has worked most satisfactorily. Not only the pupils, but also the parents, became intensely interested in the work. This is an excellent way in which to educate public opinion with a view to securing the necessary finances to carry on the work with equipment. When people recognize the real value and need of this work they are usually able to find means of supporting it.

Another practical method of bringing about a demand for this work is thru girls' domestic-science clubs and exhibitions of their handiwork. Thirty-one counties in Nebraska are organized for this work and exhibitions are held annually.

It has been said that, "In its broadest statement, the problem of the world's economy is to develop and give scope to individual originality, the benefits of whose exercise are registered in individual character as well as in objective results." Thru work in the household arts and science, scope is given to individual originality and results are registered in character which are of far greater importance than the material results secured.

DEPARTMENT OF SECONDARY EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—J. STANLEY BROWN, principal of Township High School, Joliet, Ill.

Vice-President—S. A. UNDERWOOD, principal of Westport High School, Kansas City, Mo.

Secretary—ELLIS U. GRAFF, principal of High School, Omaha, Nebr.

FIRST SESSION.—TUESDAY AFTERNOON, JULY 6, 1909

The department met in joint session with the Department of Science Instruction in the Assembly Room, East High School, with President J. Stanley Brown presiding.

A paper was read by E. J. Townsend, dean of the University of Illinois, Urbana, Ill., on the subject, "The Status of the High School and Its Relation to Colleges and Universities."

George A. Cowen, head of science department, West Roxbury High School, Boston, Mass., read a paper on "The Aim and Methods of Science Instruction in Secondary Schools."

These papers were discussed by George B. Morrison, principal of McKinley High School, St. Louis, Mo., Lewis B. Avery, principal of High School, San José, Cal., Joseph Main, professor in the University of Tennessee, Knoxville, Tenn., and W. H. Bartholomew, principal of the Girls' High School, Louisville, Ky.

President Brown then announced the following committee on nominations:

George B. Morrison, St. Louis, Mo. Claude P. Briggs, Rockford, Ill.

E. E. Scribner, Ishpeming, Mich.

The meeting adjourned.

SECOND SESSION.—THURSDAY AFTERNOON, JULY 8, 1909

The meeting was called to order in the Assembly Room, East High School, at 2:30 o'clock. The president's address was delivered by President J. Stanley Brown, principal of Township High School, Joliet, Ill., on the subject, "The Autonomy of the High School."

The second paper of the afternoon was read by Eugene Davenport, dean of the State University of Illinois, Urbana, Ill., on the subject, "Educational Unity and Its Preservation While Meeting the Demands for Industrial Training."

The third paper, "The Ethical Value of the Vocational in Secondary Education," was given by Frank H. Hall, superintendent of Illinois Farmers' Institutes, Aurora, Ill.

These papers were discussed by Edward C. Bishop, state superintendent of public instruction, Lincoln, Nebr.

Gilbert B. Morrison, principal of the McKinley High School, St. Louis, Mo., presented a Report of the Committee on Six-Year Course of Study.

It was moved and seconded that we express our appreciation for the large amount of work and the success which has attended the work of this Committee. Carried.

The following officers were then elected:

For *President*—David E. MacKenzie, principal of Central High School, Detroit, Mich.

For *Vice-President*—W. H. Bartholomew, principal of Girls' High School, Louisville, Ky.

For *Secretary*—Ellis U. Graff, principal of High School, Omaha, Nebr.

The meeting then adjourned.

THIRD SESSION.—FRIDAY FORENOON, JULY 9, 1909

The department met in round-table conferences as follows:

A.—PHYSICS AND CHEMISTRY

The round-table of physics and chemistry met in the Assembly Room of Trinity Church at 9:30, under the leadership of George W. Benton, principal of Shortridge High School, Indianapolis, Ind.

Gilbert B. Random, teacher of physics, High School, Sacramento, Cal., presented a paper on "The Recent Movement in Physics."

This paper was discussed at length.

B.—HISTORY

The round-table conference in history met in the Assembly Room of the East Side High School, under the leadership of V. K. Froula, principal of Central High School, St. Paul, Minn.

The only paper presented at this round-table was by Principal Froula, on the topic, "The Content and Method of High-School History."

The entire session following the reading of this paper was devoted to its discussion.

C.—MATHEMATICS

The round-table conference in mathematics met in the Sunday School Room at Trinity Church at 9:30 A. M., under the leadership of Herbert E. Slaughter, associate professor of mathematics, University of Chicago, Chicago, Ill.

The following papers were presented:

a) "The Illinois Syllabus on Algebra for Secondary Schools" by Henry L. Rietz, assistant professor of mathematics, University of Illinois, Urbana, Ill.

b) "The Treatment of Geometry for Secondary Instruction" by Earle R. Hedrick, professor of mathematics, University of Missouri, Columbia, Mo.

c) "The Real Problem in Its Relation to the Teaching of Geometry and Algebra in Secondary Schools" by James F. Millis, head of the department of mathematics, Francis W. Parker School, Chicago, Ill.

A discussion followed the reading of the papers.

The department then adjourned.

ELLIS U. GRAFF, *Secretary*

PAPERS AND DISCUSSIONS

PRESIDENT'S ADDRESS

THE AUTONOMY OF THE HIGH SCHOOL

J. STANLEY BROWN, PRINCIPAL OF TOWNSHIP HIGH SCHOOL, JOLIET, ILL.

For years we have met in committees large and small, in conventions far and near, to discuss admission requirements to college. The high school in these discussions has been a kind of shuttlecock to be knocked first in one direction, and then in another, and, willing or unwilling, it has been compelled to submit to the dictation of some unconstituted, unlawful, and, in many cases, self-appointed authority from *without*. The same authority has presumed to say what studies shall be taught; how much of each shall be taught; what the character of the teaching shall be; and quite generally, even if indirectly, who shall do the teaching. Now, all this has gone on for more than a quarter of a century in America in a public school, supported by the taxation of the people!

If one stood at some distance and perceived the actions now going on and could see others proposed, he would be justified in condemning government by the people, by the majority, and would be pardoned if he thought he had suddenly been transported to an oligarchy, and was not a citizen of this American democracy. Who has published the admission requirements necessary to enter the high school, and sent them to the lower schools with the statement that none could enter the high school until these entrance requirements were satisfied? Do you know any such public high school's action? And, if anyone dared do such a thing there would be such an upheaval as would put to shame the Messina earthquake; and yet this is what the colleges and universities have been doing to the high schools ever since I have known anything about a high school. It is high time to call a halt. We ask no more from the institutions above than we grant to those below, i. e., to make our own courses of study to fit the needs of our constituents, to give the greatest freedom for the development of the individual's greatest natural powers, and to have him received kindly by the higher institution when he has graduated from the high school and is recommended for entrance to the higher institution. I am completely convinced that President Judson is right when he says,

Any young man or woman who has graduated from a four-years' course in a good secondary school, and, in the judgment of the principal of the school, is capable of doing college work, ought to be admitted regardless of what subjects he studied during those four years, and without examination.

If one were to judge by the action of some of the college authorities, they are yet thinking that the college does not exist for the student, but the student for the college; and when you come in contact with some of the departments, you are constrained to believe the whole college exists for the purpose of supporting, defending, and propagating that department and not the reverse. Some men act as if the subject they teach were of greater importance than the school or the student, but the only sane position to take in school and college is that the school is for the student, the teacher is for the student, the subject is for the student. And whenever we lose sight of these most fundamental conceptions, we abandon all worth any consideration.

We are come to the Rubicon. We have by rather slow processes of educational evolution reached a point where we, as representatives of the secondary schools of America, must proclaim *autonomy* for the public high school. The control, the policy, the direction of the high school, must be from within itself, not from without by some self-appointed, unlawfully constituted authority. We have talked for years in our conventions about college and university domination and have almost universally agreed that such domination is unjust and un-American because the whole student body must be subjected to the thing which, in truth, belongs to only a few. Shall the indefensible demands, made upon the 5 per cent. of the high-school graduates who enter college, be applied to the 95 per cent. who do not go? Shall we continue to permit tradition to discriminate against "up-to-date" and outweigh it? The high-school

principal gladly accepts the judgment of the teacher in the lower school when he sends a group of boys and girls to high school with the statement, "These young people have completed their elementary-school course and are prepared to go on with high-school work." He accepts them in good faith, too, not on probation or under suspicion, nor does he ask them to stand in line for ten hours until some one individual has an opportunity to examine his certificate of good moral character, to see where, when, and, of what parentage he was born, to find out the business of his father, his nationality, and if the applicant is a young woman, to find out whether her mother belongs to the "Daughters of the American Revolution."

I repeat, the principal accepts the judgment of the teacher in the lower school without question. And, furthermore, when the principal needs an extra teacher and applies to the university or college "Committee on Appointment of Teachers," he accepts without examination or condition the recommendation of this "Committee on Appointment of Teachers." Now does it not seem fair and just if the product of the lower school is accepted by the high school, and the product of the university or college is accepted by the high school, that the product of the high school should be accepted by the college or university on equal terms? If the public high school maintains its democracy, it can never be conducted in the interest of a tape factory. The public high school wants a square deal; it wants the privilege of managing its own affairs.

Now let us hear what some eminent educators have already said over their own signatures:

In the May, 1909, issue of the *World's Work*, Mr. James P. Munroe says:

The great body of secondary teachers should say to the colleges: "For these many years we have adapted our standards and our courses to your entrance requirements, set with no knowledge and with no thought of what we could or ought to accomplish. Although we have tried to carry on special courses for those pupils who were not to go to college, your demands have really set the pace and created the atmosphere for all our schools. Our boys and girls have had to be single-molded to your arbitrary standards; in future, your standards must be many-molded to our boys and girls. We propose to develop every pupil in the way that is best for him alone; your work, like ours, must be diversified and humanized to carry along the same process of development; therefore your examinations, or, better still, your standards of achievement to be determined otherwise than through examinations, must be made wide in range and flexible in combination so that our boys and girls may keep their thoughts solely upon our requirements, not mainly upon yours.

Not until they have thrown off the incubus of the present absurd college requirements will the high schools be able to begin to work out the problem—the hardest in education—which is especially theirs. That problem is how to educate children to be true citizens and effective workers; for, in the four years of the high-school course, the great development out of irresponsibility into responsibility ought to have taken place; and the child, subject to others' wills and swayed by others' thoughts, should have grown, during those four years, into the young man with his own will active, his own thoughts busy, his own powers disciplined, ready and eager for the splendid fight of life. Until the high schools have begun to make themselves a powerful social force instead of a mill for examination-grinding, they will fail to meet the real and crying needs of the community.

State Superintendent Cary, of Wisconsin, says in a recent paper:

The examination system for entrance to college means dry rot in the secondary schools. . . . It is evident that the broader the road leading to the college door, the better for the boys and girls of the nation, hence the better for the nation. . . . There is not the shadow of an excuse for the domination of the high schools by the universities in any state in which the high schools have been brought up to a fair standard of excellence, and in which the state has come to see the necessity of making a system out of the schools of the state. . . . The colleges seem to want only the intellectual cream of the country. This tendency is away from the democracy of intellect, and it is unfortunate, for the reason that at present our schools pay a premium on power to absorb and give out again the instruction received. The student who is slow in maturing, or who is so original in his bent of mind that he finds it difficult to conform to the order of things that he finds around him in the schoolroom, has an uphill road to travel in getting thru the secondary school, and especially in getting into college. The aristocracy of intellect is the bane of many a higher institution of learning. This would not be so bad if the precocious student always proved to be the best in the end and the most helpful to his fellow-men; but it often happens that he falls by the wayside in later life, while the student who did not make his mark in college becomes the benefactor of his race.

To make a college course useful in the way of preparing for efficient citizenship, except in the broadest and most general way, is not the ideal of the college or university today. This tendency and ideal the higher institution of learning forces down into the secondary school. Such an arrangement forces all to take college-preparatory courses or forego college, as has already been stated. It brings utility courses into disrepute and disarranges the natural valuation that would otherwise be placed upon the various studies of the high school.

What we ask is that the universities shall release their grip on the schools of the state, and give them a chance to develop. They ought to be permitted to develop freely from within and not be forced into the Chinese shoe of college-entrance requirements.

In the May issue of *Education*, Superintendent Stratton D. Brooks, of Boston, says:

The decision as to admission should be based upon the unofficial or at least unsystematic judgment of the principal. By this I mean that no schematic arrangement of percentages or subterfuges or reports should take the place of the real judgment of the principal, based upon daily contact thru four years of a secondary-school course, from which he concludes that the pupil will or will not succeed in the more difficult phases of college work. While for purposes of accrediting, some schematic arrangement may be necessary and some statement showing that a certain number of hours have been devoted to history or mathematics may be unavoidable; yet what is needed is the personal element which causes the principal to write at the bottom of the report, "This boy will, in my judgment, do college work acceptably." This judgment should not be formal and perfunctory, or lose weight because it is a printed statement, or be concealed in an elaborate certificate; but it should come directly from the principal himself in the full belief that such an expression of opinion is the full measure of his responsibility in the case.

Upon the university is to come the responsibility for giving to the young men such conditions of instruction and such surroundings in influence and in companionship that ideals of accomplishment shall be instilled, and that he shall be held to perform the tasks required by the university itself.

Dr. Edward L. Thorndike says:

The traditional entrance examinations do not prevent incompetence from getting into college; do not prevent students of excellent promise from being discouraged, improv-

erly conditioned, or barred out altogether; do not measure fitness for college well enough to earn the respect of students or teachers, and do intolerable injustice to individuals.

Dr. John M. Coulter, of the University of Chicago, says:

The high school exists primarily for its own sake; and secondarily as a preparatory school for college. This means that when the high-school interest and the college interest come into conflict, the college interest must yield. It also means that the function of a preparatory school must be performed only in so far as it does not interfere with the more fundamental purpose of the high school itself. It also means that independent dictation by colleges, either directly or indirectly, must be changed to adaptation to what the high schools can do and ought to do, as determined by the high schools themselves. The high school must be regarded as an autonomous, *not* a subordinate, institution. . . .

What the universities need is not a specific kind of preparation, but a certain degree of intellectual development, a development which is usually much broader than that obtained from the average college preparation. I may be allowed to say, as the result of many years of experience, that this average college preparation presents to the universities the most narrow and unevenly trained material that can be imagined. Nowhere are the evils of specialization so apparent as in the entrance preparation demanded by many colleges. If this specialization results in comparatively poor college material, its results may be regarded as simply disastrous to the high school in its primary purpose. This is not a plea for the multiplication of studies in the high schools, for one of their great weaknesses today is their tremendously congested condition. It is a plea for the relief of this congestion by reducing the university demands, not in quantity, but in specific assignment, leaving the schools freer to exercise their own judgment in the selection of special subjects.

The time has long passed when any aristocracy of subjects has any right to claim the privilege of standing guard over every avenue leading to a higher education. *Any student who has successfully pursued a well-organized and coherent course for four years in a high school should be able to continue his work in the universities.* There are differences of opinion as to what constitutes a well-organized and coherent course, but it could be outlined by principles rather than in detail, and the *schools themselves* should be responsible for its construction. A minimum of subjects and a maximum of time, continuous rather than scattered work, a range broad enough to touch upon all of the fundamental regions of work, methods that will secure precision in thought and expression, contact with the life and work of the times in which we are destined to live, are certainly principles that are sufficient, but concerning whose details none should dogmatize, for they may well vary with the teachers and with the local conditions. . . .

Lately the entrance examination system has now and then thrust itself upon my attention afresh. I do not know whether this ghost of a dead past stalks into your educational banquets or not, but it is rampant in certain universities that rather pride themselves upon being haunted. A better scheme to show how not to do it was never devised. At the present day it is peculiar to the Chinese theory of education, and that nation should be allowed its exclusive use. It is both barbarous and unscientific. I would make no serious objection to its barbarity, if it were scientific, that is, if it obtained the information it seeks. What teacher does not recognize that the estimate of the ordinary examination must be tempered by knowledge of the daily work, or grave injustice may be done? How much greater the need of this tempering in the extraordinary entrance examination? If the tempering is necessary to obtain the facts, why not substitute the tempering entirely for the examination?—which means, of course, the substitution of the daily knowledge of the teacher for the ignorance of the university examiner. I wish no better evidence concerning the intellectual equipment of a candidate for entrance into a university than the judgment of the teachers with whom he has worked, for I can get no better, nor any other half so good.

It is strange that the universities are more concerned about their **raw** material than

about their finished product. If they would be a little less sensitive concerning entrance requirements, and a little more particular concerning graduation requirements, it might be a better expenditure of energy. It has always seemed to me that the fine-meshed sieve is set at the wrong end of the university.

Now these opinions are mainly from college and university men. They are not sectional; they are representative. They are the expressions of beliefs and opinions which have been slowly forming for years, and might not have found expression during the year but for the equally significant fact that there is a growing demand from people outside the teaching profession, who have a right to be heard, asking whether the public high school is meeting the needs of the community; whether the type of curricula common a decade or two ago is as defensible now as then; whether the colleges and universities that had most to do with determining the contents of those curricula are indeed as capable today of deciding what is best for these 800,000 adolescents attending secondary schools as are the *teachers* in these schools who come in daily contact with them and know their abilities and ambitions.

The high school wants theoretical, practical, constructive, and interpretative autonomy. It does not propose to ask for bread and get a stone. The high school wants peaceable autonomy extended to it by all the colleges, east and west, north and south; but we must have it, even if it has to come thru legislative enactment, state by state.

Authority must be commensurate with responsibility. When the high school has authority to do what seems to it best for the community, it is glad to be responsible for its action.

The young people who develop naturally by assimilation of intellectual pabulum will do their work when they enter college; those who are stuffed for a temporary stunt at examination time need not be expected to do normal college work, no matter how good a showing is made on examination.

We are glad to admit the unbounded benefit which public education owes to the higher institutions of learning, and we would not detract one iota from the most that is due; but when they assume the rôle of dictators of the plans and policies of the public high school, they have transcended their powers. We therefore urge all progressive high-school principals and teachers to stand as one person for the autonomy of the public high school.

UNITY IN EDUCATION AND ITS PRESERVATION WHILE MEETING THE DEMANDS FOR INDUSTRIAL TRAINING

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The fundamental questions before educators today and the ones that are fraught with the most far-reaching consequences are those that arise out of the issues of industrial education.

The rise of the common man and his insistence upon his rights to learning mean nothing less than universal education; and his further insistence that

this education shall be so given as to meet his everyday needs—this means industrial education; for the masses are, always will be, and always should be, industrial.

It is perfectly clear, therefore, that if the children of all occupations, industries included, are to be admitted to our schools, then these schools must fairly represent and prepare for all useful activities, even the most common industries, and if any industry is not adequately represented then will the children desert that industry, the public will suffer at that point and universal education will be to that extent a failure and a bar instead of a help to general advancement.

Now the demand for universal education with its ill-defined corollary, industrial education, caught us unprepared. We have maintained for a long time well-established courses directly designed to fit for the three learned professions—law, medicine, and theology. They were strictly technical courses, as professional as are the modern courses in agriculture or engineering; but they had been so long taught that we commenced to conceive of them as in some way fundamentally educative and we began to speak of them as general and finally as cultural, assuming that this particular form of education is the kind that everybody needs and wants. We therefore administered it in allopathic doses for the infectious disease known as universal education, thus putting our excellent old machine to new uses for which it was never designed.

No wonder the machine creaked at the joints. No wonder the product was often disappointing. No wonder that when the young man took those courses, with a view to becoming an educated country gentleman, he turned into one of the professions which the courses were especially designed to produce. No wonder that the son of the mechanic did the same. Then the farmer said: "Too much learning is dangerous; you must keep them ignorant or they will leave the farm," and the mechanic said: "I see the point. It is just like any other machine: you feed the board in but the machine turns out the box or the pattern it was set to make whatever the board might have been. It may not be a good box, but it will be as near that as anything, and it is certain to be nothing else."

And they put their heads together, these two, and this is what they said: "The trouble is in the machine. The machine is all right for the purposes it was made to serve, but what we need is a pattern of our own design," and in this way arose the technical schools and colleges both in agriculture and in mechanical engineering. These schools, being made to do a certain work and to produce certain results, of course produced those results; that is, succeeded, and in succeeding they have proved that education is no bar to industry, *providing the education is of the right kind*, for men so trained do return to the farm and the shop and succeed.

In this perfectly natural way has arisen the demand for industrial schools: first of college grade, resulting in the system of state universities; and now of secondary grade in the form of agricultural high schools in the country and of trade schools in the city.

These later demands represent the same protest against using the old academic courses for all purposes in the high schools as earlier arose against the same academic blunder on college levels. The earlier protest resulted in the separate technical college which is finding now its best expression, strangely enough, not where it stands alone, but where it exists side by side with other courses of all sorts, and the question now before us in secondary education is: Shall we add industrial courses in the existing high schools and thus preserve our educational unity in secondary education without retracing the long and difficult road fought out by the colleges, or shall the high schools turn their backs upon the call for industrial training from the masses, as the colleges once did, and thus force the establishment of separate industrial schools of secondary grade, sacrificing, certainly for a long time to come if not forever, all hope and possibility of anything like educational unity? This is the question that is flatly before the educators of this country today; and we are very near the parting of the ways in the matter, for affairs are moving swiftly and the question must be answered soon and decisively or it will answer itself without much reference to higher educational ideals.

In the meantime it behooves our educators to do some pretty rapid thinking and execute some lightning-change acting to determine rapidly and once for all whether we want the separate school or whether we will extend our secondary system as we have our college till it shall become truly universal.

My own preference is decidedly in favor of industrial courses in existing high schools and against the separate school. This is for reasons which I will briefly set forth mainly along agricultural lines, partly because my own knowledge is best in this field and partly because a definite proposition is before the country to establish a separate system of agricultural schools. I have elsewhere¹ at considerable length given my reasons for opposing the separate system of schools and for advocating separate courses in existing schools. These reasons I will here briefly summarize as follows:

1. Separate schools can never be so good. This is axiomatic for both economic and pedagogic reasons. No school designed to minister to a single class of people and to a single line of interests can ever be so well equipped in the fundamental arts and sciences—in chemistry, biology, physics, history, literature, economics, and the so-called humanities generally—no such school can be so well equipped as can one designed to minister broadly to a variety of interests. Indeed, even if the attempt is made and a wide range of subjects taught, these same subjects will of necessity be studied and taught from a comparatively narrow standpoint.

In saying this, I do not overlook the fact that the separate agricultural school has certain distinct advantages. They are the same advantages that are enjoyed by any school or other enterprise that undertakes to do a single thing without regard to its relations. Its advantages arise from the comparative

¹ See *The Next Step in Agricultural Education*, published by the University; also *Education for Efficiency*, published by D. C. Heath & Co.

simplicity of the contract it undertakes. It is a fact, of course, that any school founded, manned, and equipped to do a single thing and minister to a single interest gains much in directness by its simplified problem, and by the direct methods it naturally employs. But it loses in breadth and relative values, as has been indicated, and the best proof of it is that none of the separate schools yet founded offer as much even in science as the nearby high schools; and what they achieve is industrial training rather than industrial education—the training of the operative rather than the education of the citizen.

2. Separate schools will tend strongly to peasantize the farmers. To undertake to train the children of farmers in a system of inferior schools, such as these must inevitably be, with little knowledge of and less regard for the affairs of other people—such an attempt, if it succeeds, will peasantize the farmers in America more rapidly and more certainly than they were peasantized by other causes in Europe generations ago.

To segregate any class of people from the common mass, and to educate it by itself and solely with reference to its own affairs, is to make it narrower and more bigoted, generation by generation. It is to substitute training for education and to breed distrust and hatred in the body politic. Knowledge is necessary to a just appreciation of other people and their professions and mode of life; with this only can a man respect his own calling as he ought and love his neighbor as he should. We cannot segregate and make an educational cleavage at the line of occupations except to the common peril.

3. To educate the children of different classes separately is to prevent that natural flow of individuals from one profession into another which is in every way desirable both from the public and the private standpoint. If the children of farmers are systematically put into schools where only agriculture is taught, many a good lawyer and many a good citizen will be spoiled to make an indifferent farmer. Boys do not necessarily inherit the father's profession. In a very large sense their natural faculties come from that common stock of human characters that constitute the heritage of the race, and the individual has a right to an education that is broader than the occupation and the narrow environment in which he was born. True, he should be educated thru and to a large extent by means of his environment, because that is the compass of his own experience; but if we educate him *within* his environment, we dwarf him in the process, and we do not truly educate him.

Again, many a boy, city born, has the instinct to get back to nature. He should have at least a fair chance to do so. Because a girl is born in the country is no sign in America that she should be a farmer's wife; nor if she is born in the city is it a sign that she should not. My plea is, in the name of common-sense and American citizenship, educate all these people together in one school, with a curriculum varied enough to fit for more than one occupation and more than one mode of life, to the end that a man may follow the occupation of his father or may change it, as he pleases; but whether he follow or whether he change he shall do so intelligently, and for a reason, and in either case he shall

have some knowledge of and sympathy for the occupation and the life of his neighbor.

It is said that if you give a bright boy a good education and broad associations, he will leave the farm, and the only way to keep him there is to train him to be contented with a humble life. That false theory of education was exploded long ago. Experience has abundantly shown that education does not necessarily result in taking people out of the country except when that education is one-sided and faulty. I have no sympathy with the plan of keeping boys on the farm by the blindfolding process.

4. Secondary schools devoted solely to agriculture would of necessity cover so much territory as to require the students to board and room away from home. This for students of the high-school age is unthinkable. Every boy and every girl in the early and middle "teens" should sleep every night under the father's roof, and this can be if a community establishes a single school capable of catering to all its needs, and does not insist upon educating one class here and another there, compelling long journeys to get to the right school. A single agricultural school in ten counties, or in five counties, or in one county—think of it!

The problem of secondary education is very largely the problem of the fourteen-year-old, and we should never rest easy till every farmer's boy and girl may go to the *nearest* high school, and there find instruction not only in agriculture but in the other industries and professions which concern the community, and after having lived the day in an atmosphere broader than their own studies go home again at night to dream of what a great thing the world is, and to wake with an intelligent appreciation of the place in it which they propose to occupy.

5. Agriculture not only needs contact with other interests, but they need contact with agriculture. Everyone who has had experience with the introduction of agriculture into our state universities will bear witness that the benefits of association are mutual.

In the university which I have the honor to serve, our agricultural students not only get a training and a breadth of vision which they could never get in an institution devoted solely to their own interests, but their presence on the campus is of distinct advantage to the other students. Their directness and their practical methods of work are wholesome to the institution, at least they are so declared by the non-agricultural professors and students alike. In every way, as I see it, much is lost and nothing gained by separating the students of different classes and educating them apart, each in the occupation of the father.

Nor would I put all the so-called industries in one class of schools and the professions in another. In a large sense all study is professional, and in a very large sense, indeed, it is also industrial. Some portion of the training of every individual should be industrial, even manual, and another portion of the training of every individual should be distinctly mental, until habits of thought are

formed quite *independent of material activity*. For these reasons, which are fundamental, I would not separate industry from any of our schools. I would make it an integral part of every curriculum, its proportion and character depending upon the prospective profession of the individual; but above all I would have the essence of all occupations, or at least of as many as possible, represented in the same school.

My point is, if all these subjects and professional points of view are offered in the same school with more than one avenue into life, then the opportunity is presented for the individual to acquire professional knowledge and skill without becoming narrow as a man. If farmers and lawyers and editors and engineers and artists and merchants are educated separately they will either hate or despise one another, or both; if they are educated together, each will acquire, besides proficiency in his own line, a sympathy for others that comes so easily with that partial knowledge and acquaintance thru daily association in the school age, and that comes with so much difficulty in any other way.

6. To establish separate schools for agriculture is to injure the development of existing high schools. These schools are not "city schools" in any proper sense of the term. The great bulk of them are located in small towns and villages in a distinctly rural environment. To denominate all these as "city schools," to be devoted solely to the interests of city people, is as absurd as it is unjust to them. These schools, like all others, have the natural right to minister to their constituency; but if now agriculture is to be put off into a separate system of schools just because the high schools have not yet taught the subject, then it will be easy, later on, to cleave off another industrial slice, and again another until the remnant that remains will be suited to nobody's need, unworthy alike of the school and the community it was established to serve; and instead of an organized system of effective education we shall have an incongruous medley of separate and independent schools, each serving its little clientèle in a narrow way without much regard to the public good—all of which is against the true spirit of universal education.

The American high school is a new institution. It has arisen from our determination to make education truly universal. Now, universal education means that all the people shall be educated, and in such a way that all the activities necessary to a highly civilized race may develop and go forward. Only a small percentage of the people will ever go to college and the *experiment of universal education will be tried out in the field of the secondary schools*.

7. Separate schools in agriculture will check the extension of high schools into country communities. High schools started first in the cities, it is true, but they are making their way rapidly out into the country, a tendency that is to be encouraged, more especially as they are showing a remarkable disposition to respond to their environment. If the interests are not divided it is entirely possible for any community, without going beyond driving limits, to throw all its energies into a school of secondary grade and make it capable of truly reflecting all its varied interests.

These modern schools must have a fair chance. They are new institutions; they have hardly been in the field a half-century, and how they have grown! There are literally hundreds of them that are giving a better education than colleges gave a generation ago, and they have only commenced to serve the people. If they have not yet solved all the problems and taught all the subjects the people need, it is no sign that they cannot or that they will not, and they should be given the chance. Every new addition to an educational institution not only serves a new public need, but it enriches all that was before. All the modern secondary school needs in order to serve us perfectly is men and money, and time to learn how.

8. This demand that agriculture be taught in the public schools is but part of the modern movement for industrial education. Whoever has lived close to the great heart of the common people and has had his hand upon the pulse cannot fail to have felt the throbbings of this new impulse for more than a generation, or to have detected its first feeble flutterings a hundred years ago. And whether he has had his ear to the ground or not, whether he has lived close to the heart of things or away in the upper atmospheres, no man can now be ignorant of the great fact that a change is coming over the spirit of the times regarding educational ideals; a change that is fundamental, and whose shadow or whose light, whichever it may be, is full upon us and can no longer be averted or ignored.

The American high school represents a form of secondary education that has arisen, or more properly speaking is arising, to meet this new demand for universal education. Agriculture, and industrial education generally, have found their true place in the universities. The next step is that they should find their true place in our secondary schools, where, after all, our attempt at universal education will render its greatest service.

And so reasons might be multiplied indefinitely, showing why it is wiser to go forward meeting our educational necessities together, but they would all be of the same general tenor: viz., that our educational problem is after all a single problem—complex, puzzling, and all that; but it is a single problem after all, and we should stay together and solve it.

The new demand upon the schools is that they should not only picture life as it was in the past, but also as it is now; that they should assist the student in understanding modern life into which he must plunge, and whose responsibilities he must shortly assume. The student feels the right to demand that some portion of his educational career and some part of his school curriculum should be devoted to making application of the wisdom of the ancients and the philosophy of life to the conditions of modern existence.

We cannot afford to break in two at any point; least of all can existing schools afford to see our educational effort divided. The logic of the situation is all against it. The new ideal is that education should fit for something instead of fitting for nothing, and this ideal will prevail among a practical people like ourselves. Educators can take hold of this natural bent for practi-

cal activity and cultivate it until as a people we shall be both efficient and cultivated. If they do not do this the efficiency will develop by itself and we shall all come short of our highest possibilities.

THE ETHICAL VALUE OF VOCATIONAL INSTRUCTION IN SECONDARY SCHOOLS

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To do useful things is moral. To do useless things, or to do nothing, may be unmoral or it may be immoral. To do harmful things is immoral. I use the words useful, useless, and harmful with reference to the effect of an act upon humanity as a whole.

Earning is doing useful things. To earn, says the lexicographer, is to "merit or deserve, as by labor or service." So earning is moral; always moral; positively and unqualifiedly moral. It is, then, in a high degree praiseworthy to earn, i. e., to perform labor which entitles to a reward.

Earning usually has a money value; it always has an ethical value. Earning usually—not always—results in acquisition. The thing acquired usually—not always—is money itself, or something that has a money value.

The amount a man earns measures half of him; what he does with his earnings measures the other half. The expenditure of what someone else has earned does not count, unless in the doing of that, he earns.

Neither earning nor its reward always relates to material things; tho, Roosevelt tells us, these constitute the foundation without which no superstructure can be raised. He earns who contributes to human well-being. His contribution may relate to the material, the intellectual, the ethical, the aesthetic, or the spiritual. If he contributes, he earns. If he does not contribute, he does not earn. If he contributes more than he consumes and destroys he is a public benefactor. If he contributes less than he consumes and destroys, he is a parasite. But whatever may be the nature of his contribution, he usually—not always—expects a material reward that bears some reasonable relation to the value of the service performed. This is as true of the teacher and preacher as it is of the farmer and mechanic.

Fortunately every normal youth desires to acquire. Education should not diminish this desire, but it should direct it—direct it toward acquisition by earning. "The desire to get money without earning it," says David Starr Jordan, "is the root of all evil." The desire to get money by earning it seldom harms the one who entertains the desire, and never harms his neighbors.

Ordinarily a love of learning is praiseworthy; but when this delight in the pleasures of learning becomes so intense and so absorbing that it diminishes the desire and the power of earning, it is positively harmful. Education that does not promote the desire and power to do useful things—that's earning—is not worth the getting. Education that stimulates a love for useful activity is not simply desirable; it is in the highest degree ethical.

By far the greater part of what the average man earns comes thru his vocation. It is true that one may contribute to human well-being in a religious way without being a preacher, in a political way without being a congressman, in an educational way without being a teacher—and such contributions are of untold value; nevertheless, for all men the vocation is fundamental. Vocational efficiency limits the contributing power.

A manhood ideal that does not include vocation as an essential factor cannot possibly be a high ideal. A character ideal that does not involve vocational efficiency is pretty nearly a negative affair—a zero that only has value when it stands beside a significant figure. The significant figure is *the doing of useful things*.

A citizenship ideal without the American home would be far from complete; and, as Dutton says, "Vocation is the chief corner-stone of the home." That young man who is planning to become an efficient wage-earner, and to save a part of his earnings to make a home for himself and somebody's sister, is about as safe—ethically safe—so far as plans for the future can make one so, as any young man in the community.

From the time the boy is old enough to begin to think seriously about vocation and home-making—these are usually associated in the thought of the normal boy—he should be encouraged and assisted in the proper solution of these thought-problems which will determine in large measure the character of his career and the outcome of his life-struggle.

"Blessed is the boy," says Jenkin Lloyd Jones, "who comes early to a life purpose, who knows what he wants to do." And "Blessed is the man," says Carlyle, "who has found his work; let him ask no other blessedness." And has the school nothing to do in helping the boy to come early to a life-purpose; in helping the man to find his work; in thus bringing blessedness upon youth and manhood? Let Dr. Eliot answer: "The perception or discovery of the individual gift or capacity would often be effected in the elementary school but more generally in the secondary; and the making of these discoveries should be held one of the most important parts of the teacher's work."

Unmeasured harm has been done by graduation-day orators who have encouraged our young men first to get an education, then find a vocation. "It is dangerous," says Davenport, "to attempt to educate a live boy with no reference to vocation." Wherein lies the danger? In the fact that the lad will not accept what you offer. There must not only be reference to vocation, but the work must relate itself in some way to the particular vocation which the youth expects to follow. Otherwise one of two things will happen: either the boy will change his vocational plans, or he will leave school. Vocation-colored ideals have the strongest pull of all on the normal boy; and it's "pull" we need to keep the boys in school. G. Stanley Hall says that 34 per cent. of those who drop out of the high school do so from lack of interest. It is believed that a very large part of this number could be saved to the school, saved to themselves, and to society, thru vocational attractions.

Indirectly, then, as well as directly, vocational instruction has ethical value, since by it many boys will be kept longer in school than they otherwise would be, and thus learn more of language, literature, history, and such other branches of study as mark human progress and promote the social uplift.

To secure great ethical value thru vocational instruction in the high schools, it is by no means necessary that these schools should become actual trade schools. It is only essential that the work shall in some small way relate itself to a great variety of industrial pursuits, just as it already does to a great variety of the so-called learned professions. G. Stanley Hall says, "There must be [in the high schools] the germs and educative extracts of just as many trades and industries as possible." Germs and extracts of what trades and what industries? First, those that are carried on in the immediate vicinity of the school; then, of any occupations that will appeal to the pupils as desirable avenues to independence thru service—desirable opportunities for earning.

Says Dr. Eliot, "A passion for service must fuse with a passion for knowledge." *Fuse with it*, not come after it. The truth is, the normal boy will not accept education unless it *does fuse with his desire to do things*. The Lord made him that way and it is utterly useless for the modern educator to attempt to build him over—to reconstruct him in accordance with some pedagogical, psychological, sociological notion of what symmetrical manhood is. Symmetry will take care of itself if efficiency is provided for. Symmetry often gets on its knees to efficiency. Symmetry may go hungry; but efficiency is well fed. Symmetry may be able to carry its own weight; but efficiency can do that and much more. It can take care of itself and other people, too. Paraphrasing what some wise man has said, it is the highest art to give the effect of symmetry by contributing to utility. "Symmetrical manhood" that cannot earn its own living is not symmetrical.

Personally I would rather send out pupils who are lop-sided and useful, than those who are seemingly symmetrical and useless. A bent back is symmetrical if a bent back is best adapted to carrying the burdens one ought to carry. Symmetry takes second place; efficiency, the first. And life-efficiency involves vocational efficiency. A man without a vocation is more to be pitied than "the man without a country." And the country of which he is an inhabitant is to be commiserated, too.

There seems to be a growing conviction that the results of schooling, from an ethical viewpoint, are quite unsatisfactory.

The president of a Y. M. C. A. in a city of 35,000 people recently told me that the most troublesome young men who frequent the Association rooms are students from the high schools. He said they seem to have no respect for other people's rights nor for authority. And this in a city whose high schools have no superiors, and few equals. In these high schools, as in most others in cities of this size, the desire for athletic victory and social distinction seems to overshadow or leave in the background all effort to prepare for that kind of vocational efficiency which will promote positive contribution to human well-being.

Let it be conceded that the schools must not be given credit for all the good there is in the world, nor held responsible for all the evil. The simple question is, Are they doing their full share, all they ought to do, all they may be reasonably expected to do, in leading young people into cheerful obedience to moral law?

Most people who answer this question at all will answer it unhesitatingly in the negative; but as to the method of improving the school work in this respect, there will not be anything like unanimity. Some will say, put God into the constitution and the Bible into the schools and the thing will be done. Others believe that in addition to a formal recognition of our dependence upon a Higher Power and a perfunctory reading of a scripture selection "without note or comment" each morning, there must be regularly enforced religious instruction; that the rewards for obedience and the penalties for disobedience should be constantly held up to view. But since such a procedure would evidently involve sectarian teaching, many of the true friends of the public school ask to have only such ethical and religious training as will be in accord with the doctrines of *all* the churches. Then there are those who pay taxes and who have children in school who say that there must be no odor of church or Bible about it. The instruction must be purely ethical.

The writer believes that almost any religious instruction is better than no religious instruction, provided it can be administered without provoking an irreligious spirit. But if out of it there are to come bitter discussions and unrighteous contentions, it were better that it be entirely omitted from the public-school work and that the strictly ethical be substituted for it.

But what shall be the nature of the ethical instruction? May we safely depend mainly upon the effect of committing to memory literary gems and didactic poems? The danger is that they will exist in memory only; that they will not become, to any large extent, a part of the pupil's life; that they will not, in many instances, produce "ideals that will stand the strain of weaving into human stuff on the loom of the real."

"Memory gems" with ethical content, are, no doubt, of great value; but thinking about doing something that needs to be done, about doing it better than it was ever done before, and whenever possible, the actual performance—"the taking of the step from knowing to doing"—these things are worth more in practical ethics than the mere memorizing of all the beautiful sayings of Longfellow, Lowell, Whittier, Bryant, or Emerson. Who is greatest? Not he who memorizes most, but he who serves best. Let him who would be greatest among you be your servant; let him do something that needs to be done; let him have a vocation, a calling, and attend to it. This is overcoming evil with good; it is ethical training by displacement. It is filling the mind so full of thoughts of doing useful things that there will be little room for evil thoughts and little time for evil action.

Says Fra Elbertus, "A man is seldom more innocently engaged than when he is honestly earning money." It is quite as true that a man is seldom more

ethically engaged than when he is honestly earning money. The following has the advantage of brevity and covers the ground: A man is seldom more *ethically* engaged than when he is earning.

Every wakeful hour of a man's time should be spent either in earning or in getting ready to earn. Rest is to prepare for work; and recreation is for the same high purpose. "Work," says Dr. Vance, "is the chisel that shapes character and sharpens wit." And work suggests earning, and earning suggests vocation. So thoughts of vocation shape character and sharpen wit—are ethical.

The goal of school life is useful activity. That this should be the goal is in the interest of the state and of the student. In no other way can the community realize on its educational investment; in no other way can the pupil secure for himself the greatest good. It is a law as sure as that of gravitation that he who does most for other people, does most for himself. This again suggests useful activity, earning, vocation.

Eliminate thoughts of vocation from student life and you emasculate it, deprive it of its highest and most stimulating purpose, and take away that which is the most important incentive to effort, the very generator itself of vigor and virility.

Learning to read and to write, acquiring knowledge for its own sake, enjoying the mental acquisitions made possible by an acquaintance with present and prospective religious delights, do not seem to result in improved moral conditions. Learning to do things that need to be done, acquiring knowledge to be used in contributing to the general good, being trained into habits of useful activity, getting an education, information, wealth, and religion, in order that one may give more to the community in which he lives—such exercises as these, with such a purpose in view, do promote material, moral, and spiritual well-being.

"The boy who learns to work is on the road to salvation," is the legend that appears upon a periodical published at the Illinois Reformatory. "Interest a boy in useful occupation," says Fra Elbertus, "and you transform chaos into cosmos." If interest and skill in the doing of useful things are helpful in reformation, may they not be equally so in formation?

"One monster there is in this world," says Carlyle, "the idle man." But it is not work alone that is the panacea for much of the evil that is in the world; it is work with the purpose of contributing to some human need. Activity, with selfish enjoyments as the principal aim, will not give the most satisfactory results. The enjoyments sought may be sensuous, intellectual, or spiritual and the results be disappointing. The aim must include a little more than the self. The self must be lost to be saved—lost in useful employment.

All approved vocations relate to human needs. All thoughts of vocation help to give purpose to educative effort.

Manual training, domestic science, agriculture, and commercial instruction are all suggestive of approved vocations. It is believed that each of these

branches of study and training has a distinctively ethical value; that each should be given a place in the schools; and that in connection with these the "germs and educative extracts of as many trades and industries as possible" should be introduced, to the end that a larger number of pupils may be induced to accept high-school work, and that a smaller number of those who graduate may squander time in aimless or ill-directed activity, or in unwise and even disreputable enterprises.

DISCUSSION

E. C. BISHOP, state superintendent of public instruction, Lincoln, Nebr.—With the youth, the choice of vocation is largely the result of environment. With the adult, forced by the demands of civilized life in the maintenance of a home, vocation seeks a favorable environment or, with the more enterprising, changes or attempts to change the unfavorable environment which may be his lot to a favorable environment.

The choice of vocation comes to the youth more from his environment, including all associations and child experiences, than from inherent tendencies. The boy follows the vocation of his father, or steers clear of it, largely according to the probabilities and the possibilities he sees in such vocation. The farmer's son who sees only drudgery, self-denial, social ostracism, and a struggle for bread in the farmer's life is liable to choose, rather than the farm, the life of the merchant, the mail carrier, the banker, the pawnbroker or other who enjoys some of the liberties and the returns for service which the boy's imagination pictures as self-satisfying. On the other hand, the farm boy who finds pleasure, mental stimulus, and soul satisfaction in the daily tasks; who enjoys the social privileges required for the proper development of his social nature; who sees a good measure of what the Creator has stored up in the earth, on the earth, and in the air for him who sees, hears, and touches Nature; who sees for the future an outlet to his ambition, an avenue for development, a promise of home maintenance—such environment leads to the selection of a vocation which will develop in the boy, and continue in the man, that degree of ethical culture which will give us a contented and enlightened citizenship, a successful business man and an enrichment to all elements of civilization which he touches.

The same applies to the child of the carpenter, the miner, the lawyer, the preacher, the teacher, to the home of the common laborer, the business and the professional man. I do not attempt to analyze effects of environment on the child in the society home of the man who contributes little or nothing to the enjoyment, elevation, or material welfare of the race, but who lives upon the product of others' efforts.

What can the secondary school do toward training the child to an appreciation of his environment or toward the development of an attitude which will cause him either to seek right environment or change his environment to meet the physical, mental, or soul needs of enlightened manhood?

The course of training offered in the secondary school should be sufficiently localized to present to the child the realities and the possibilities of his environment, and at the same time retain the necessary balance of general, cultural branches. This means that in the agricultural community, in the manufacturing community, the mining community, the fishing community, the lumbering region, the child will find thru his school duties an insight into the home life which will lead him to know and to feel the beauty, the opportunity, the duty, and the rewards that come from an intimate acquaintance with all the good about him.

Such education will assist the youth to a sensible choice of vocation, and will enable him at an early age to utilize the means at hand all the way along for preparing himself best to enjoy the vocation of his choice, and to enrich his vocation by the addition of early, earnest, devotion to it.

There may be inherent qualities in the youth which will lead him away from the vocation suggested and encouraged by his home community. If such be the case, as it often is, the acquaintance with, and the best possible enjoyment while there of the home environment is ethical training of good degree which strengthens the youth in his application to whatever vocation he may choose.

I am not an advocate of turning our secondary schools into trade schools for the great body of American children. I favor, first, the elimination from the secondary schools of all subjects which, when properly handled, do not contribute to the right ethical development, and the elimination of subjects which have been placed there for ethical culture alone, but which can be supplanted by other subjects of equal value in ethical training and which, in addition, bring to the child sane ideas of the beauty of nature, the field of literature, the artistic art in manual skill, and the dignity of all labor necessary to the maintenance of a home in a civilized community—a home where the good things of life are appreciated, demanded and secured by labor—labor with the hand, the eye, the intellect, and the heart.

Trade schools serve a useful purpose in providing for delinquents, defectives, unfortunate, and for bright, ambitious children who early choose vocations, and early seek preparation therefor, where at the same time they may receive the proper degree of the broader education due every American child. But trade schools should not draw from the secondary schools the great body of children who can be kept therein by the training which should give sufficient opening for the training of the home life in such a manner and degree that the child sees thru the home and its duties the means of development for the fullest enjoyment of the larger life.

THIRD REPORT OF THE COMMITTEE ON SIX-YEAR COURSE OF STUDY

BY GILBERT B. MORRISON, PRINCIPAL OF MCKINLEY HIGH SCHOOL,
ST. LOUIS, MO., CHAIRMAN

In 1905 at Asbury Park the Department of Secondary Education voted to appoint a standing committee on Six-Year Courses. This committee consisted of Gilbert B. Morrison, *chairman*, Wilson Farrand, Edward Rynearson, J. H. Francis, and A. B. Graham. That committee reported at Los Angeles in 1907 (see pp. 705-10 Los Angeles volume of *Proceedings*). The report was unanimously adopted, with the recommendation that the work be continued. The new committee consisted of Eugene W. Lyttle, *chairman*, E. W. Coy, Oliver P. Cornman, T. A. Mott, J. H. Van Sickle, J. Stanley Brown, and John H. Denbigh. That committee reported at Cleveland, Ohio in 1908 (see pp. 625-28 Cleveland volume of *Proceedings*). This report contained three essential features: First, a synopsis and an indorsement of the previous report; second, an outline of what should be expected of pupils at the end of the sixth school year—age twelve to thirteen, and third, a suggested list of studies for pupils of the seventh and eighth grades. This report was also unanimously adopted with the recommendation that the work be continued. The new Committee consists of Gilbert B. Morrison, *chairman*, E. W. Lyttle, E. W. Coy, J. H. Van Sickle, Oliver P. Cornman, T. A. Mott, and F. E. Bolton.

Following is the report of this committee:

First, the committee in reporting progress wishes to express a further

indorsement of the leading points and suggestions of preceding committees on Six-Year Courses.

Second, the sentiment for the six-and-six division is growing. By an extensive correspondence thru private and circular letters we note that there is a freedom of discussion and a hospitality in the entertainment of the idea of a new division of the twelve years in the public schools, not noticed in former correspondence. Almost everyone who has given any expression seems to believe in some departure from the eight-and-four-year division, and several cities report these departures. In some cities six-year courses in the high school have been in vogue for several years.

Superintendent Stratton D. Brooks, of Boston, Mass., says:

We have had for many years six-year courses in the two Latin schools. During these years these schools have been allowed to admit grammar-school graduates for a four-year course. At the present time approximately half of the pupils in each of the Latin schools are four-year students.

Superintendent A. B. Poland, of Newark, N. J., writes:

I have recommended to our board the differentiation of courses at the end of the sixth year in the grammar school in order that boys and girls who desire it may take the maximum of vocational work and a minimum of so-called culture studies. . . . It is expected that courses of this kind will be started in the near future.

Superintendent Homer P. Lewis, of Worcester, Mass., says:

We have a modification of the elementary course in this city which is a step toward the change which you are investigating. Two years before their entrance into the high school, pupils are allowed to enter a preparatory school in which a beginning is made of the study of Latin, French, and German. The pupils are admitted to an advanced standing in these subjects in the high school and are able in some cases to shorten the high-school course by one year. The trial we have made proves to some of us, at least, that it is desirable to go farther in the change, and I for one believe thoroly in a six-year high-school course.

In Baltimore some children are allowed to begin high-school work in the seventh elementary grade, and while these children are not actually enrolled in the high schools any earlier on this account, they do, however, complete the high-school course earlier. Experience of the past six years in Baltimore goes to show that a pupil who has been successful in this preparatory work can complete a high-school course in three years, thus saving one year.

Frank Rollins, Second Assistant Commissioner of Education of the State of New York, says:

Replying to your letter in reference to six-year courses for elementary and high schools, I would say that the New York State Education Department has this matter under favorable consideration, but has not yet arrived at any conclusions as to organization of the work. We shall look to your report for valuable guidance and assistance in the further development of this plan.

Richmond, Ind., has had the six-and-six division for several years. In 1896 a building was erected for all eighth grades. In 1899 the "seventh A" grades were sent to the same building. The building is equipped with gymnasium, shop, and domestic rooms. The work is conducted on the same plan

as the high school. Pupils are permitted to begin their high-school Latin or German on entering the "seventh A" grade in this building, omitting enough of the elementary-school work to make this possible. In the eighth grade work the pupils take algebra during the last semester. So popular has this plan become that the board will provide this year another building for this central school which will be large enough for the entire seventh and eighth grades of the city. The superintendent believes that this plan permits pupils of different powers to do different amounts of work. Some enter the high school with one semester of high-school credit, some with two credits, some with three, and some with four. This central school works in close accord with the high school.

Superintendent Henry P. Emerson, of Buffalo, N. Y., writes:

We have had no experience in Buffalo with six-year courses for high and elementary schools, but the State Department of Education is about to initiate a movement looking in that direction. . . . I do not look for any sudden or revolutionary change in this particular, but the plan contemplates providing for three courses after the sixth year—one making room for the study of a foreign language, another providing for business instruction, and a third providing facilities for industrial training. So far as the courses coincide, the pupils will receive instruction together. We are to make a beginning in a small way along these lines next September.

Superintendent Walter H. Small, of Providence, R. I., says of the Hope Street School in that city which was opened twelve years ago:

In this school after six years of work in the elementary schools pupils who show tendencies to strong scholarship are allowed to enter a six-year course in the high-school building completing their grammar-school studies and commencing certain high-school studies. Probably one-third of the pupils go thru the six-year course and then enter the regular four-year high-school course. [Mr. Small is of the opinion that it might be better for some who have been promoted at the end of the sixth year to have remained and completed their course in the elementary school.] I cannot say from this, however [says Mr. Small in conclusion], that the six-year course is a failure.

From Nashville, Tenn., Superintendent H. C. Weber writes as follows:

We are drifting toward the division of six years each for elementary- and high-school work. We have gone, we think, quite far along the road. Of course, children graduating from the eight years of the grammar-school work are admitted to the high school without examination. There is here, however, just before the opening of each half-year term, an entrance examination for high-school students and this examination is open to our seventh- and eighth-grade pupils, as well as those coming from other schools. Quite a number of pupils having just finished the sixth or seventh grade have entered our high school under this plan and have acquitted themselves very creditably indeed. This examination is not based on the grammar-school course of study but is intended to test the power of the pupil to do high-school work. We are shaping our seventh- and eighth-grade work in the grammar schools to the end that it will not bear directly upon training for the high-school work, but will round off, as best we can in that time, those pupils who will not attend the high school.

Superintendent S. O. Hartwell, of Kalamazoo, Mich., says of a plan started there:

We have two schools, and next year shall have a third into which grade eight will

be carried in a departmental school with grades nine and ten. The result has, I think, been helpful to both high and grammar grades. If the building arrangements were convenient, we should carry the seventh grade also into the departmental system. From observation I should say that that system has strengthened the quality of work done in the eighth grade, and I am glad to report from a pretty careful following of the lists that, in schools thus arranged, the falling off between grades eight and nine has been a steadily decreasing factor. This has been partly from familiarity with high-school work secured while still in the eighth grade, partly from the fact that we have been able to promote pupils "by subject" between grades eight and nine in just the same way as in the upper grades.

Of their departmental plan in Saginaw, Mich., Superintendent E. C. Warner says:

Our seventh and eighth grades were organized on the departmental plan about the year 1898 and we have been running that way ever since. An option of German is given to pupils in the seventh grade and of German and Latin in the eighth grade. These seventh and eighth grades are not segregated with the high school, but are still part of the grammar schools, housed with the grades and under the direction of the ward-school principals. Under this plan the scheme seems to have worked here very well.

Superintendent Wm. A. Greeson, of Grand Rapids, Mich., who read a paper at the meeting of the North Central Association of Colleges and Secondary Schools, writes:

There should be a different organization in primary schools from that which is best adapted to secondary schools, and the separation in methods of organization should come between the sixth and seventh grades rather than between the eighth and ninth. If this point could be established and carried into effect I think the schools would be greatly improved. I do not think it makes much difference whether we have seventh, eighth, and ninth grades together in a building or whether we have the six upper grades organized in one school.

During the past year a vigorous inquiry into the actual situation in the seventh and eighth grades in the schools of this country has been in progress by committees of the New York and Brooklyn Teachers' Associations. Inasmuch as the question of six-year courses turns largely on changes in these grades, the results of such an inquiry are important. Thru the courtesy of Van Evrie Kilpatrick, chairman of the Committee on School Organization, and Mr. Charles S. Hartwell, secretary, we are permitted to present the following significant data:

On July 28, 1908, two hundred return postal cards were mailed to representative superintendents and high-school principals, asking their practice and views regarding the seventh and eighth years. Ninety-three were filled in and returned from eighty-eight cities in thirty-three states and one from Nova Scotia, giving the following summary of results:

I. Length of courses: Nine years elementary, 7; eight years elementary, 74; seven years elementary, 3; six years secondary, 6; five years secondary, 3; total, 93.

II. Promotion by subject in seventh and eighth year: Do promote by subject, 26; do not, 67; total, 93.

III. Departmental teaching in seventh and eighth years: Entirely departmental, 24; in part departmental, 69; total, 93.

IV. Teachers in seventh and eighth years college graduates: All, 1; some, 31; not any, 61; total, 93.

V. College-bred teachers in seventh and eighth years: Preferred, 46; not preferred, 45; no answer, 2; total, 93.

VI. Organizing the ninth year with the seventh and eighth years under departmental teaching and promoting by subjects as a junior or lower high school especially in large cities: Favored, 54; not favored, 33; no answer, 6; total, 93.

As to six-year courses Mr. Hartwell adds:

During last August my attention was called to twenty-two cities in twelve states having a six-year, or at least a five-year high-school course. . . . The experiment of six-year courses is being tried. From what I have so far learned this much is evident: The seventh and eighth years of school are now the battle-ground for improvement in courses of study. There is a conflict going on between the idea of advancing the individual child, on the one hand, and the stereotyped idea of mass promotion on the other. The public expects the teacher to prepare the child for self-support rather than for college, and the sound of this demand is distinctly audible. Departmental teaching, promotion by subjects, organized faculties of teachers, inquiry into the needs and the bent of each child, attention to the training of the hand and the eye thruout the seventh and eighth years while the pupil is within the period of compulsory education, will bring valuable results to any city which demands the best services of each of us. The six-and-six plan moves in the direction of better pedagogy and better economics.

There is a general impression revealed by this and other correspondence that the whole course of instruction, both elementary and secondary, should be simplified; that the differentiation of pupils' work should begin at the end of the sixth grade; that time is wasted on nonessentials and on impractical topics; that there should be greater flexibility in the promotion of pupils; that the whole system should be reorganized.

A study of the schools of Great Britain and Germany within the past year discloses that differentiation begins in both countries at the point corresponding to the end of our sixth grade; that the elements of the "higher" mathematics, of science, and the study of the foreign languages are begun at that point, and in many of the best schools even earlier; that the secondary period is six to eight years in length; that in the best schools in Great Britain, notably those of Birmingham and Leeds, work corresponding to the high schools of this country is completed at about the age of sixteen.

The committee is of the opinion that while we may not expect or hope for any sudden or extensive changes in the general scheme of organization from the eight- and four-year division to the six-and-six division, nevertheless we feel certain not only that the change is inevitable but that it is already in progress and is taking place in different ways to meet local conditions. We further believe that the reorganization of the public-school system along the lines of this discussion is of fundamental importance, and that every reasonable measure that can be taken to overcome the inertia of the established system and to make for an organization more in consonance with advanced educational opinions and with the needs of modern society should be employed. The problem involves not only division by years, but a well-digested curriculum of both the elementary and secondary branches. This curriculum should

(a) provide the content of the work, including vocational studies; (b) establish the points of differentiation; (c) consider methods of teaching and plans for promotion of pupils.

Respectfully submitted

GILBERT B. MORRISON, *Chairman*

OLIVER P. CORNMAN

JAMES H. VAN SICKLE

E. W. LYTTLE

E. W. COY

F. E. BOLTON

T. A. MOTT

Committee

ROUND-TABLE CONFERENCES

A. PHYSICS AND CHEMISTRY

THE RECENT MOVEMENT IN PHYSICS

GILBERT RANDOM, TEACHER OF PHYSICS, HIGH SCHOOL, SACRAMENTO, CAL.

This movement in physics of which I am to speak had its origin about four years ago, and was essentially a more or less united effort on the part of physics teachers all over the country to come to a closer agreement as to the scope and character of elementary high-school physics. It was evident that during the ten or fifteen years previous to this time, physics had enlarged its scope and changed its character considerably by reason of a number of important new discoveries, and extensive new applications of its principles in the industrial and commercial field. The result was not only to raise the question as to whether or not the scope of elementary high-school physics should be enlarged, but also to change materially the bases upon which we had heretofore judged the relative importance of the different subjects in physics. Each physics teacher in high-school work in his own way sought to adjust himself to the new conditions, with the result that there arose a very wide divergence of opinion and practice regarding both the scope and character of the work. Questions like the following arose and became all important: What work and how much work shall constitute elementary high-school physics? Should this work be covered in one year? What relative proportion of the time should be devoted to laboratory and class-work? A desire among physics teachers to know each others' minds regarding these matters started this movement. At the meeting of the Central Association of Physics and Mathematics Teachers held in Chicago on December 1, and 2, 1905, a discussion took place regarding the advisability of approving the list of experiments for a year's course in high-school physics as suggested at a conference of physics teachers at the meeting of the National Educational Association in July, 1905. In the absence of any very definite prevailing opinion, a committee was appointed to examine the list with a view to revision, and to take such other action as it might think desirable to strengthen the elementary course in high school physics. The committee consisted of C. R. Mann, of the University of Chicago, C. H. Smith, of the Hyde Park High School, Chicago, and C. F. Adams, of the Central High School, Detroit, Mich. The committee prepared a list of about one hundred experiments, including the full list suggested by the National Education Association conference and different ones from another list suggested by the North Central Association of Colleges and Secondary Schools. This list was sent out as circular No. 1 to several hundred physics teachers in different high schools thruout the country, with the request that they indicate

a choice of experiments suitable for a year's course in elementary high-school physics. The teachers were also asked to make suggestions, and in order to make these definite and determinate as to the extent of the unanimity of opinion, the committee included a set of questions of which the two following are examples: "What is your criterion for judging the usefulness of a laboratory experiment?" and, "What is needed to make physics interesting to students, and stimulating as an educative factor?" This it was hoped would provide suggestions for the preparation of a syllabus of experiments. About three hundred replies were received. But only twenty of the experiments received the sanction of two-thirds of the teachers, even in view of the fact that they had been suggested by two important bodies of teachers. The suggestions offered indicated a wide divergence of opinion regarding essentials, values, and methods in elementary high-school physics. They were, nevertheless, valuable to the committee inasmuch as the extent of divergence was in itself an important fact. The committee used its influence to interest other associations of physics teachers in different parts of the country, and induced them to appoint similar committees or representatives. These representatives met for consultation and decided to continue the work already started. A joint committee was organized and was constituted a commission for further work. Accordingly, circular No. 2 was issued. It contained eight or nine questions of which the following are examples: "What is the best method of keeping a laboratory notebook?" "What amount of subject-matter should be taught in a one-year course in elementary high-school physics?" "In which year in the high-school course is physics to be placed?" "How much of the time given to physics should be devoted to laboratory work?" "What is the aim and purpose of instruction in physics?" About one hundred and thirty replies were received. The first question—namely, the best method of keeping a laboratory notebook—involved a half-dozen or more subtopics and on one of these the agreement was a little less than one-half and on all the others less than one-fourth. On the second question regarding the amount of subject-matter in a one-year course there was practically no agreement. Most of the teachers believed that the amount of subject-matter usually compressed into a one-year course was too great; but the agreement on what to omit was less than one-fifth on any one suggestion. On the third question, as to which year in the high-school course physics should be taught, the agreement was less than one-half in favor of the fourth year. On the fourth question, the amount of time to be given to laboratory work, the agreement was about one-fourth in favor of half the time for laboratory work and half for recitation work. On the next question, regarding the purpose and aim of instruction in physics, there was a wide divergence of opinion. Less than one-fourth favored the view that the purpose and aim was to bring the student into intelligent touch with the world of natural phenomena about him. On the matter of how to test whether or not the purpose and aim had been attained, the agreement was less than one-seventh.

The commission continued its work by issuing circular No. 3. This set forth ten theses arranged from similar ones formulated and considered of fundamental importance by French and German physics associations which had considered and passed upon the same matter. The following are the theses:

1. The subject-matter of a one-year course must be reduced to two-thirds its present amount, or else the time allowed for covering it increased to one and a half years.
2. If the subject-matter is reduced, the more abstract, mathematical, and technical topics should be first eliminated. The better established portions of the subject should have precedence over the more recent unproved speculations on the ground that in the limited time it is better to teach things which are likely to be believed when the youngster is grown up.
3. In a first-year course the method of presentation is of far greater importance than the choice of subject-matter. It is better to present a few topics in such a manner that they are powerful examples of the method by which science obtains its results than to try to teach a large number of more or less scattered facts and theories in such a way that they can only be memorized.
4. No definition should be introduced until the concepts with which it deals have been

clearly developed in the student's mind by means of a discussion of concrete cases from the student's own world. A definition should be justified before it is stated, not after.

5. No law should be stated until the concepts and relations with which it deals have been implanted in the student's mind by means of a discussion of common experiences and of simple qualitative demonstrational experiments. After the concepts and the idea that there may be a quantitative relation among the facts involved have been grasped, the quantitative relation may be stated and proved either by demonstration or laboratory experiment. The student must be given an intuitive and qualitative perception of the relations summarized by the law before he is expected to comprehend it intelligently.

6. The student should be made to see clearly that laboratory apparatus furnishes the means of determining quantitatively the relations summarized by the laws, that it is not necessary to remember the details of the apparatus to appreciate the law, and that the exemplifications of the law are not confined to the apparatus.

7. The student should be made to comprehend that every law has been established by a method of approximation, so that the statement of the law is always a statement of what we believe to be true in an ideal case. Hence, the measurements by which the law is established give results which approach more and more nearly to the law, the more carefully the measurements are made, and the more completely complicating effects are eliminated. He should also understand that in every practical case the law is not verified because of friction, air, resistance, etc.

8. Measurements of the relations involved in practical cases should lead to determinations of efficiencies rather than the verification of laws. Such determinations of efficiency furnish for the laboratory work problems which are of great value and interest because of their reality.

9. As few units as possible should be employed, and they should be introduced only when a necessity for their use appears. Their introduction should be justified in advance, as in the case of definitions. The more abstract units, like the dyne and erg, should be omitted.

10. Examinations and quizzes should be framed to test the student's comprehension of and ability to use the more important principles of physics. The questions should not ask for mere statements of laws from memory, nor should they contain complicated arithmetical puzzles of the sort that seldom occur in practical work. They should not demand descriptions of laboratory apparatus, nor of unrelated facts which do not have any immediate bearing on the principles involved. They should rather consist of questions as to the argument by which a principle is established, and as to how the principles are applied. The problems should be simple, dealing with concrete applications of principles and be of the kind likely to be met with outside of the classroom and laboratory.

About one hundred and sixty-five replies were received, fourteen approving the theses *in toto* as presented, and eighteen more approving them in general with some modifications, making an agreement of less than one-fifth. The remainder of the replies presented a variety of opinion difficult to classify. Some were very radical, expressing the view that the methods of teaching physics were for the most part wrong and failed to get proper results. Others expressed preference for what they called the "natural history" way of teaching physics. In reviewing its work the commission made the following observations: "On counting up the letters received during the past year, it appears that suggestions and criticisms have been received from four hundred and eighteen different teachers. Of these two hundred and seventy are in secondary schools, one hundred and thirteen in colleges, and thirty-five in normal schools. Every state in the Union, except Delaware, Florida, Idaho, Arkansas, and Nevada, has a representative among the number. Yet the only conclusion that all can agree to draw from the summaries of the answers as printed in the various circulars is that we teachers are far from united on any one point. Some insist on the introduction into the laboratory of a large amount of quantitative work; others are equally insistent that this work should be qualitative. Some want to emphasize the idea of energy; others prefer to base the work on concepts of force. Some approve of making the course strongly inductive and of trying to teach scientific methods of thought; others declare this method useless and insist on mastery of the subject-matter. Some declare that the course should be limited to pure science; others believe in making it more practical. Some wish to introduce more mathematics; others want to teach in the natural history way entirely."

The commission then suggested that the reason for these wide diversities of opinion

was probably the effort to do too much work and too many things in the one year allotted to physics. In other words, physics teachers were endeavoring to work beyond the limits of what might properly be called the elementary high-school physics. This view is strengthened when we consider the following facts which in the past few years have had a decided prominence in both the discussions and writings of physics teachers.

First, The effort to make the work very practical in the sense that the student is to apply his knowledge of physics to things about him. For instance, the practical teacher in the study of the pendulum would explain its connection with the mechanism of clocks; in studying velocity and acceleration, explain the speed of bullets and the starting and stopping of trains; in studying heat, explain the application of cooling by evaporation to the operations of an artificial ice-plant, and the application of vapor pressures in the use of steam and gas engines; in studying electricity, explain the operation of power plants; in studying gases, explain air brakes and gas meters. Physics work should of course be made practical, but there is no limit to the amount of work that can be crowded into a course on the supposition that every subject should be taught in relation to its practical applications. Some teachers would believe that physics work is not practical unless it enables a student to explain common things around him. They would in fact make this a test of the efficiency and value of instruction in physics. Yet when we consider this in connection with the innumerable common but complicated applications of elementary facts in physics in cities, the idea is absurd. Moreover, classes in physics in the high school are made up of girls and boys together, the girls often being as numerous as the boys, and what would be considered practical to boys would by no means be so to girls, so far as vocation is concerned.

Second, The effort to show the application of principles on a large scale and in relation to the industries, as, for instance, the pressure of water and gas in mains, the use of belts, pulleys, gears, cranes, wheels, etc. There is, of course, great merit in work of this kind, but it is in the province of the technical schools, and should not be brought into elementary high-school physics.

Third, The effort to make the work interesting by bringing in related topics. For instance, the study of the air brings in balloons and airships; the study of light, the X-rays and radio-activity; the study of central forces, the gyroscope; the study of electricity, wireless telegraphy and telephony, etc. Sometimes local plants, as for instance, gas works, power stations, and factories are given special attention.

Fourth, The inequitable division of time between the various subjects in physics. For instance, some teachers would devote one-fifth of the entire time of the work in physics to electricity alone, because of its general use, practicability, and interest. Electric generators, motors, transformers, electric lighting, telegraphy and telephony are taken up. Each of these is an extensive subject and the small amount of time spent on each is not profitable. I believe that these, together with electrostatics, might well be eliminated from the work in electricity. We should then teach only the principles of magnetism and current electricity. This would include primary batteries, secondary batteries, electro-motive force, current strength, resistance, Ohm's law, conductivity and conductors, magnetic properties of currents, magnets, electrolysis, heating effects of currents, the measurement of current electricity involving the principle of bridges, galvanometers and meters, and possibly one or two other topics, depending somewhat upon the emphasis placed on certain facts. This would take four or five weeks' time, which is more in harmony with the allotment of time to the other branches of physics. It is true, of course, that boys show a keen interest in and know a good deal about the telephone, telegraph, and dynamo, and for that reason it would be well not to omit these, yet on the other hand, it is good logic to say that if we have to omit any subjects, we had better omit those which the student knows most about and can best acquire knowledge of by himself.

I shall not follow in detail further this movement, but call attention to some important results derived from it.

First: It called attention to the fact that physics teachers in secondary schools were not working together, and were not agreed on even the most fundamental facts concerning their work. The reasons as they appear now were doubtless lack of organization, and lack of trained men who had been long enough in the work to have acquired a view both prospective and retrospective. It is only in recent years that any considerable number of college men have begun to devote the best part of their lives to science work in the high schools. The salaries were such for a long time that men could enter the work only while looking about for a more lucrative vocation.

Second: It brought college professors and secondary-school men in science work closer together, and their exchange of views caused each to see important relations in the work of one to that of the other. College professors have ceased largely to set up burdensome and needless requirements in the sciences for admission to their work. There are very few among them now who claim or believe that students do as well in college physics when they have not had the high-school physics, as when they have had it. They co-operate actively with high-school physics teachers and adjust their courses in many cases to the high-school requirements. They are willing, as was shown recently by the work of this commission, in defining the physics unit, to allow the high-school-physics men to determine for themselves the high-school requirements for college entrance. Some colleges are now giving a preparatory course in physics for students who have not had high-school physics, and an advanced course for those who have, showing that full recognition is given to high-school-physics work.

Third: I believe it has pointed out the futility of trying to expand high-school-physics work into the various avenues of interesting technological work. As a preparatory course for several branches of work, it should not neglect one for the other or go farther into the work than time will permit. In many cases it would be well even to sacrifice some of the work that we consider highly practical and interesting.

Fourth: It has called attention to the need among high-school-physics men of a certain consensus of opinion regarding their work to which the work may be adjusted without danger of stagnation. As an example of this I call attention to the theses just read, and to the report on the definition of requirements in elementary high-school physics as published in *School Science*, June, 1909.

Fifth: It seems to point out clearly the fact that quantitative and qualitative experiments and work must go together. One is not to be used to the exclusion of the other. The proportion of each may be regulated to suit the work.

Sixth: It points out further, I believe, the fact that physics and mathematics go together, each giving aid to the other. The proportion of mathematics may be varied to suit the work, but it should never be eliminated from the work. Problems, when properly used, strengthen both the physics and the mathematics work. The teacher who neglects them is throwing away a powerful agent in the training of the minds of his students. They should not, of course, be arithmetical puzzles, but helpful illustrations of the use of principles.

B. HISTORY AND MUSIC

THE SCOPE AND VALUE OF HISTORY IN THE HIGH SCHOOL

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The life of a youth is profoundly influenced by the nature of the knowledge which his plastic mind apprehends and ponders during a series of years. With the more general acceptance of this thesis is coming gradually a greater care as to the content of the courses of study which are to be the mental pabulum of the young people of the land. Subjects of study whose only excellence is formal discipline are gradually giving way to subjects whose content has some practical value over and above mere discipline of the mind.

Accordingly, the study of English in high schools and colleges already commands the attention and respect that it properly deserves; but let us not be satisfied until history, "in some respects the noblest of the group" of humanities, receives all the attention and respect that is rightfully its due.

In his excellent volume on the *Principles of Secondary Education*, Professor DeGarmo tells us that "besides influencing and even forming the student's permanent attitude of mind regarding civil rights, duties, and responsibilities, history performs a number of intellectual and ethical functions *that are largely peculiar to itself*." He then mentions five of the most important of these functions: (1) development of judgment; (2) engendering of the spirit of toleration; (3) training of a reconstructive imagination; (4) exercise of the memory in a way peculiar to history; and finally (5) he says, "Historical study should materially assist the student to develop his permanent attitude toward political liberty and self-government."

Many other testimonies of the strongest kind as to the ethical value of history are not wanting. G. Stanley Hall tells us that "history enriches and adorns the mind with noble ideas." Elsewhere he speaks of it as the "window of the soul that looks out upon the deeds of the race, showing man engaged in the work of revealing what is essential in his inward nature and what he makes real in his institutions." Again, we read from him that "it is mainly at the altars of history that patriotism feeds her fires. In the long run the greatest means of teaching patriotism must be history and literature. Study of the times that tried men's souls tends to form souls that are capable of enduring trial." Eggleston tells us that "the main object of teaching history is to make good men and women, cultivated and broad men and women." Further, he says that "history is the great prophylactic against pessimism," because there we find that each succeeding age is better than the preceding. Froude tells us that "history is a voice forever sounding across the centuries the laws of right and wrong. Opinions alter, manners change, creeds rise and fall, but the moral law is written on the tablets of eternity. Justice and truth alone endure and live. Injustice and falsehood may be long-lived, but doomsday comes at last to them, in French Revolutions or other terrible ways."

But besides all this, history should receive greater attention in our schools because of the opportunity it affords for the acquirement of rich stores of facts. This is the age of receptivity; the youth can accumulate facts and store them in his brain for future reference more easily now than at any other time. Hinsdale says that

the main thing the teacher of history in the primary school has to do, and *largely so in the secondary school*, is to teach facts. While facts do not make a man a historian he cannot be a historian without them. Teachers of a philosophical turn may dislike this humble work, they may speak of it contemptuously as "mere memorizing," but no real educator speaks lightly of the memory. The common sense of mankind rightly adjudges praise to the man having a rich store of information.

Professor James tells us that

to exalt the logical faculties is all right, to belittle the faculties of retention and reproduction is all wrong. In the practical as in the theoretic life, the man whose acquisitions *stick* is the man who is always achieving and advancing; whilst his neighbors, spending most of their time in relearning what they once knew but have forgotten, simply hold their own.

The epoch-making Report of the Committee of Seven has done wonders in enhancing the study of history in the high schools of our country. The four-years' course outlined by the committee, and the excellent methods of teaching suggested, have vitalized the subject and increased the interest in history teaching and study. But it seems to me that the Committee of Seven was entirely too modest in the amount of time to be *required* of secondary-school pupils for the study of history. It is true that a four-years' course is outlined and recommended, but how many pupils can take or do take as much history as that in the high school under existing conditions? Granted that the courses offered in the secondary schools of the country have been greatly improved in their scope and the teaching vastly

bettered in method, the question still confronts us, Has the number of secondary-school pupils taking a comprehensive or cumulative course in history greatly or even appreciably increased? In my opinion, the strength of the report of the committee was badly impaired by the irresolute paragraph on p. 128 which modestly recommends one block for the classical and Latin courses; two blocks for the scientific; and three blocks for the English. Let us hope that the forthcoming Report of the Committee of Five will be more aggressive and demand three years of history of all high-school pupils even if this has to be done at the sacrifice of some Latin or some algebra. But it is not improbable that a greater demand in history may be made on high-school pupils without much or any sacrifice in other lines of study.

The next step in the development of the secondary-school course of study should come along the lines of greater correlation. The altogether too strict division of studies into departments, often inharmonious, is resulting in much waste of effort and energy. It is quite conceivable that greater correlation and co-operation in the departments of history and English might easily result in some economy and greater efficiency. One of the most erroneous fallacies among high-school pupils is the feeling on their part that as soon as an examination is passed in any one term's subject that part of it is forever sealed and settled and the teacher must not expect to revive it or expect the pupil to remember anything about it. And thus also a pupil often feels much aggrieved if, forsooth, a teacher in one department should happen to ask him about something that he thinks belongs to another department. Our whole system seems to favor and foster the cramming idea. Every subject or part of a subject needs to be remembered only during the current term, that is, until the examination is passed.

Here is a striking illustration of the lack of co-operation between departments. In the penmanship class pupils are taught neatness and carefulness as indispensable parts of the written page. Immediately after the efforts of the penmanship teacher to inculcate these ideas, another teacher stamps them out by giving a period written test on such a multitude of history or English questions that only by the most hurried scribbling can the pupil cover the ground, and as for neatness or even carefulness of statement, that, of course, is entirely out of the question. Sooner or later, too, I hope we may find a way to cease our genuflections at the altar of the mystic figure five. If, for instance, one and the same teacher could teach elementary algebra three times a week and plane geometry twice weekly during a period of time usually needed for the covering of these two branches when taught separately, I wonder if we could not get better results or at least rid the pupils of the notion that algebra and geometry are two entirely separate subjects with no connection between them. And why should there not be a greater friendship and relationship between the departments of English and history? Why should not a logical outline, made out with great care and at the expense of much time for a history teacher, be acceptable to an English teacher also? Is not one outline carefully prepared and thought out better than two scratched off and cribbed in a hurry, more especially so when such an outline is studied and criticized by two different teachers from two somewhat different points of view? Why could not the study of some of the historical novels in common use be made to contribute to both the history *and* the English departments and thus some time be saved and perhaps efficiency gained? Let us hope that the forthcoming report will look into the matter of correlation of history with other subjects and by so doing demand greater time requirement in history without sacrificing anything elsewhere. Thus possibly the time requirement in English might be reduced from four to three years and at least one year added to the time requirement of history. But even if we cannot hope for greater economy along some lines thru better correlation and thus give added time to the study of history, I feel that history teachers have a right to demand more time for their subject even if some studies now clamoring for attention must be cut down. The day has long since passed when students should be made to feel that they can read history after graduation, and therefore they would better spend their hours in school in the study of other subjects. We

are convinced that if the student is to become a reader of good literature after his school days are over he must acquire a taste for it in school. I believe it is just as true of history. If one is going to be an intelligent reader or student of history he must lay the foundation and acquire the habit in school.

In a large school with which I am well acquainted, one hundred and seventy-four pupils graduated this spring. Out of that number about 30 per cent. had taken only one year of history; about 25 per cent. had completed two years; about 20 per cent. had completed three years; and only 10 per cent. took four years of work in the history department. When it is further taken into consideration that the graduating class represents only about 15 per cent. of the whole school, it becomes painfully evident how small a proportion of the entire school ever get to the study of United States history which someone has happily termed "the crowning work of the whole course." And even if this is not a typical case, I yet believe that the proportion of high-school boys and girls who never get more than one block of history is far too great. And, as it usually works out, that one block is quite likely to be Greek and Roman, the course that comes at the beginning. Indeed, there are schools where pupils must take history according to what is commonly called "logical sequence," so that no matter what year they happen to take up the study of history, they must begin with the ancient. To all intents and purposes, then, the majority of our pupils leave school with "serious lacunae in their knowledge of history," the very thing that the committee tried to guard against.

As things are now in common practice in high schools I should say that two faults stand out rather boldly in the teaching of history: First, we adhere a little too closely to "logical sequence" as we like to call it; and second, we do not *require* enough history of our pupils in comparison with other subjects of study and in view of the importance of this subject. I fear that our craze for "logical sequence" in history has been the means of killing off many a boy long before he has reached the "crowning work of the whole course." We have feared that if he did not begin with ancient times there might be some "serious lacunae in his knowledge of history;" and yet by the very process of subjecting him to the ordeal of "logical sequence" in history we have driven him out of school with a gap as big as the ocean between himself and his environment. The Committee of Seven does not specify which block or blocks should be taken by the pupil if he cannot take all four. Why not let the pupil's maturity determine which block he may take? If for some reason he has put off taking history until his third year, let him have English history or the block corresponding to the year. If he has put it off until the fourth year let him take American history and civics. For that matter, if he can take only one block and that rather late in the course, then I should say by all means let him take civics and American history whether in the third or fourth year. There are schools wherein eleventh- and twelfth-grade students may be found among ninth-grade pupils in ancient history, simply because, altho often thru no fault of their own, they have put off the study until that time, and the schools insist on everybody's beginning at the first block; or because, forsooth, pupils in English and American history might be on an unequal footing if all had not had the same number of blocks previously. It is true, for instance, that in the beginning classes of the high school the boys seem to be somewhat at a disadvantage in comparison with the girls; especially in history and the languages are they a poor match for girls of exactly the same grade and the same amount of previous study in these subjects. But I have seen twelfth-grade boys in United States history and civics, who had taken little or no high-school history before, nevertheless assume a leading part in classes wherein girls who had taken all the preceding blocks of history predominated. On the other hand, I have observed big twelfth-grade boys in ancient-history classes alongside the "freshies" where they seemed to evince little interest and do work not much better than that of the ninth-grade pupils. Such boys would, in my judgment, have felt more at home and have done a higher grade of work in a fourth-year history class and, I am ready to add, would have profited by it infinitely more than by being forced into ancient history. The conclusion of this is, then, that in the case of those

who cannot take all the blocks, logical sequence might well be sacrificed for the maturity and interest of the pupils. Such a scheme would have the further advantage of giving a larger proportion of pupils a chance to pursue the history of modern times, thus making a closer connection between them and their environment. As things are now in actual practice, we seem to be going on the theory that ancient history is the one block that is most important and that best meets the needs of the high-school youth. And yet, I wonder how many history teachers really feel that way? To the question: "If you knew that a pupil could take only *one* block of history, which would you recommend?" the majority of the answers inclined toward United States history, and the remainder said United States history if the student is not going to college, and ancient if he is. But it is high time that history teachers should stop racking their brains as to which *one* of the blocks in history should be taken by all pupils, and insisting that history has as much right in the curriculum as mathematics or the sciences or the languages and should be given enough time to make it a cumulative study as it should be.

And this leads up to my second proposition, that more than one year of history be required of all high-school pupils. What blocks and how many is the great question. In the opinion of the writer, the scope should be practically as laid out by the committee; nothing far short of that can be considered adequate when the importance of the subject is properly considered. In order to accomplish this, three full years in the high school must be allotted to the study of history. The committee suggests two ways in which the four blocks may be reduced to a three-year period of time. But could not something be gained by the co-operation of the grammar school? The elementary and the secondary schools are both a recognized part of the great public-school system. Why not have a better articulation between the two in the study of history? Suppose the seventh grade should devote its attention to United States history and the eighth to Grecian history. With Grecian history out of the way, high-school pupils could begin with the study of Roman, devoting, as is customary now, a half-year to it. That could be followed during the last half of the first year by mediaeval history. The next time the subject is resumed by the pupil, whether that be the second or third year in his course, he might begin with English history, devoting a half-year to it, to be followed the latter half of the same year by the modern continental period. With English history preceding modern continental, there would be a slight unraveling of the complications of this latter period and the student would approach this highly complicated subject with a little more historical knowledge and a little greater maturity. The third block, of course, should consist of American history and civics, to be given either the third or fourth year, according as the one or the other arrangement best meets the exigencies of each school curriculum.

C. MATHEMATICS

AN EXPOSITION OF THE ILLINOIS SYLLABUS ON ALGEBRA FOR SECONDARY SCHOOLS

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I. INTRODUCTORY

The syllabus of which I write was adopted by the Illinois State High School Conference at its meeting in November, 1908. This conference, which meets annually, is carrying into effect a systematic plan of preparing syllabi in various branches of study as one of the best means of securing co-operation between high-school teachers and college and university instructors.

The present syllabus is the result of a report drawn by a committee which had the matter under consideration for a year. As a member of that committee, I should say that

we studied with much care existing syllabi and obtained much of value from them. This report was carefully discussed in detail by the mathematical section, consisting of about one hundred and fifty members, present. After this careful consideration of every point in the report, it was unanimously adopted and will appear very soon in *The High School Manual of Illinois* for 1909.

The spirit and substance of this syllabus are in hearty accord with the recent movements in education to relate instruction to human interests. I think every teacher of mathematics has been impressed with the ignorance in mathematics of persons otherwise well educated. In fact, it is regarded as more or less humorous, if not abnormal, to know mathematics and its applications aside from the simplest forms of what the Germans call *rechnung*. The average educated man rarely thinks of applying mathematics beyond the crudest forms of arithmetic. If asked what benefit he derived from his study of mathematics, the answer is that he either obtained none, or that he obtained mental discipline. Far from deprecating the value of algebraic study as a mental discipline, we believe the course, which is proposed in this syllabus is more valuable in this respect than the traditional course, altho mental discipline is not its chief justification. It may appear that the movement toward reform in the teaching of algebra is designed primarily to make mathematics a more popular study. This is far from the facts. While the popularization of mathematics should be one of its results, this is by no means the main object of the movement. It has a deeper significance and is the result of higher ideals than those of making a subject popular. The deeper significance consists in relating instruction, on the one hand, to the experience and best interests of the pupil, and on the other, to relate it to broader human interests which are within the comprehension of the pupil, and with which he should become familiar.

The view is expressed in the syllabus that contact with the interests of the pupil can be better formed by studying the principles of algebra thru numerical illustrations and practical problems that come within his experience than by an attempt at formal proofs in the early stages of the study of algebra. To this end, much of the complicated and purely abstract manipulations having no immediate application, as well as proofs, are deferred until late in the high-school course.

II. TIME AND PLACE OF ALGEBRA IN A HIGH-SCHOOL COURSE

The syllabus lays down that the best division of subject-matter with reference to time is to give, first, a year of elementary algebra (first course) so arranged as to enable the pupil to solve such problems as are within his comprehension and as arouse his interest in algebra as a tool for the solution of problems which are impossible, or very difficult, by unaided arithmetical means. To this end it is highly desirable to include the treatment of quadratic equations and to omit much in the line of abstract manipulations and formal proofs. This first course in algebra should be followed by one year of plane geometry, and the two together constitute the minimum requirement in mathematics for a high-school course. This should be followed by the elective work; one-half year of algebra (second course) intended to meet the needs of those pupils who desire full preparation, for college, and a more formal treatment of the principles employed in the first course, together with advanced chapters. This should come not earlier than the first half of the third year of the high-school course.

The early introduction of the quadratic equation in the first course enables the pupil to solve many concrete problems that appeal to him as important, and this is certainly more serviceable to the pupil who takes only the required mathematics than the juggling with symbols which so often comprises a large part of the work of the first year. Furthermore, nothing seems lost to the pupil who continues algebra, because of deferring the formal demonstrations and certain difficult topics and manipulations, to give time for the treatment of quadratic equations. The study of plane geometry between the first and second courses in algebra affords a fruitful field for concrete algebraic problems and

serves to visualize the algebra, while the proofs of plane geometry, if properly presented, appear to be much more concrete to the average high-school pupil than the more formal parts of the second course in algebra.

III. CORRELATION BETWEEN ARITHMETIC AND ALGEBRA

The syllabus emphasizes that from the start in algebra the pupil should understand that each letter or combination of letters represents a number. The frequent introduction of Arabic numerals for the letters tends to make algebra real to the high-school pupil. It is undesirable to attempt to draw a sharp line of distinction at any point between arithmetic and algebra. The two subjects should be closely correlated, that is, the operations of arithmetic should suggest principles of algebra and each principle of algebra in the earlier parts of the course should be illustrated by numbers in the Arabic notation, and exercises involving letters should be interspersed with similar exercises involving Arabic numbers. The syllabus presents illustrative examples to make this point clear.

IV. OUTLINE OF A FIRST-YEAR COURSE IN ALGEBRA—ONE YEAR

In accordance with the view expressed above as to the time and place of algebra in the high-school course, the outline and discussion of appropriate topics for the first course are presented in such order as to show it possible to attain in one year the main purpose of the first course, namely, the solution of the problems which are important for their own sakes and for the information they give. To this end, as stated above, we introduce into the first year problems which require the solution of the quadratic by factoring. In fact, we thus make use of the quadratic before giving a formal treatment of fractions and proportion. The fractional numerical numbers of arithmetic are, however, used thruout the course, and some simple cases of proportion follow soon after division in the outline, so as to introduce the language of proportion in problems. The first course is to include radicals and fractional exponents only so far as demanded for an elementary treatment of the quadratic. The manipulations which involve complicated fractional exponents belong to the later course. The object and desirability of rationalizing an expression should be thoroly understood by the student before he does the work. To ask a student to accept $\frac{\sqrt{3}}{3}$ as a simpler form than $\frac{1}{\sqrt{3}}$ is confusing if it is not explained for what purpose the one is simpler than the other.

Problems of mensuration should be used to give a meaning to radicals. For example, diagonals of squares and cubes; and altitudes and areas of equilateral triangles afford abundant applications of radicals of the second order and add interest and understanding to the subject. The syllabus expresses the view that the study of the graph in the first year is not an object in itself, but should be used in so far as it can be made to throw light on the solution of problems and equations.

To give time for the order of topics thus suggested it is recommended that the following topics be omitted from the first year: complicated factoring; complicated complex fractions; simultaneous equations with more than three unknowns; binomial theorem; cube root; remainder theorem; imaginaries, and extensive manipulations with radical; difficult cases of simultaneous quadratics; H. C. D. and L. C. M. by method of continued division; inequalities; indeterminate equalities.

V. OUTLINE OF THE SECOND COURSE IN ALGEBRA

The syllabus provides first for a review of the first course, which implies a more critical examination of the topics previously treated. While the character of the problems should again be such as to touch the interests of the pupil, they should be more difficult and technical. While formal demonstrations of principles are, in general, out of place in the first course, it is highly desirable that some work of this nature be included in the second course, especially as the study of geometry has intervened, and the pupil should

now come to see the argumentation is not limited to geometrical theorems but is as important a part of algebraic work.

The syllabus insists on much graphic work thruout the course to give a geometrical interpretation to the algebra.

The outline of topics includes all subjects of algebra usually required for admission to college and a very few additional topics not required for admission to all colleges. For example, the subject of logarithms, used to shorten computations in important applications, is included as a subject in the second course.

VI. GENERAL REMARKS

The syllabus indicates the sources of problems which will appeal to the student as raising some questions whose answers are worth while. It is pointed out that great care must be exercised lest we assume too much knowledge on the part of the pupil. The borrowing should, in general, be from below rather than from above, or the emphasis is thrown away from the mathematical point involved. In the first course arithmetic should be an important source for problems. The usual problems of percentage, proportion, and interest can well be solved by algebra. This is also decidedly true of problems presented under the name of mental arithmetic. As there should be no sharp line of distinction between arithmetic and algebra, methods which have an algebraic bearing should be encouraged in arithmetic. The main object, in this connection, is to develop the pupils by generalization, and it should be regarded as a good indication of progress if they early tend toward algebraic methods rather than the more special methods of arithmetic. For the second course, geometry and physics offer a fruitful source of problems.

Many problems can be made to depend upon a single formula, such as $s = \frac{1}{2}gt^2 + at + b$ for uniformly accelerated motion. These problems may impose a large variety of conditions and lead to solutions for the various letters involved. Likewise, several problems may well be made to depend upon a single formula, such as $V = \frac{1}{3}H(B + b + \sqrt{bB})$ for the volume of the frustum of a cone.

It is held that definitions should be introduced just where needed in the development of the subject, and that they should be clear, unambiguous, and consistent with definitions required in the more advanced study. For example, a rational number should be defined directly as a number equal to an integer or to a fraction whose numerator and denominator are integers, and not negatively as a number not involving radicals.

To try to define every term used is not only bad pedagogy but bad logic as well; for this procedure often gives the pupil the impression that all the terms of a logical system should be defined in terms of something else. To be sure, it is of vital importance that the pupil understand the meaning of every term employed; but there seems to be no excuse, in general, for defining a term whose meaning he understands thoroly. It is not, in general, for logical perfection, but for what I prefer to call a common-sense understanding that definitions should be given in secondary algebra.

In conclusion, it was the evident sense of the Illinois Conference that the carrying into effect of the provisions of this syllabus would constitute an important step toward relating algebra, from the start, more definitely to the experience and interests of the pupil and to broader human interests with which the student is to become acquainted; and that it would give better results on the formal side, as the maturity of the pupil at the time of the second course enables him to comprehend processes of reasoning which could not be understood in the first or second year of high school. Furthermore, this arrangement makes it possible to show the specific purposes of algebraic manipulations—a feature almost totally lacking when much manipulation comes early in the course.

The immediate success of the plan proposed in this syllabus will depend not only upon the mathematical preparation of the teacher but also upon the ability to acquaint himself with the interests of individual students and of the community in which he works, and upon his ingenuity in adapting problems to those interests.

THE TREATMENT OF GEOMETRY FOR SECONDARY INSTRUCTION

EARLE R. HEDRICK, PROFESSOR OF MATHEMATICS, UNIVERSITY OF MISSOURI, COLUMBIA, MO.

I. INTRODUCTION

The history of geometry has much to do with our present methods and with the subject-matter itself. Originating as an eminently practical subject of prime necessity to the race, it came to be the delight of a school of logicians who discovered in it a rich field for exemplification of their processes of formal reasoning. Passing a vast array of ancient names, I mention only that of Euclid. Perhaps no work has stood the test of time—save works on religion—so staunchly as has his. That it was good work and of value to the race, is attested by not only the stolid hero-worshiping mediaevals, but much more the radical race of reformers who have given character to our whole civilization during the two centuries just passed. The spirit of his work pervades our elementary instruction in geometry to a far greater extent than does that of any other man or school of men. True, we do follow foolishly at times; we adopt for children the precise forms which he devised for adult logicians, and thus we slander his intention and do not truly follow him; but these vagaries prove only more certainly the sincere, if misguided, attempt even slavishly to emulate this master of masters.

Nor is it my purpose to attempt to urge departure from Euclid's true spirit: I shall adhere closely to the essential standards of Euclid. Where I urge insertion of new material, it is only as I firmly believe Euclid would have done had that material been known to his school; if I urge less formality in logical processes, I am confident that I shall not exceed what Euclid would have done in an attempt to impart some notion of his system to children; if I mention many omissions, it is only because the natural limitations of high-school instruction and the enormous increase in the sum-total of human knowledge—even of *mathematical* knowledge—makes *some* elimination not only desirable, but absolutely imperative.

II. THE TRADITIONAL AXIOMATIC SYSTEM DEFECTIVE, BOTH LOGICALLY AND PEDAGOGICALLY

The knowledge that Euclid's scheme of axioms and his deduction of theorems is open to certain minute, but unanswerable, criticisms from the purely logical standpoint has become so widespread that I need not enter upon the details before such an audience as this. Suffice it to say that the work of Helmholtz, Lie, Pasch, Peanc, Hilbert, Poincaré, Russell, and others, leaves no reasonable doubt but that there are flaws in Euclid's reasoning which make it untrue that his theorems are derived logically from his axioms.

Attempts have been made to revise Euclid's system to make it quite rigorous. Hilbert's famous work on the *Foundations of Geometry* is of these most widely known, but it is certainly not designed for, nor in any sense suited to, elementary instruction. Of other attempts I shall not speak in detail. One of these, designed for elementary instruction, comes about as near to absolute logic as is at all conceivable in a high-school course.

While I have every respect for this type of work, and join most enthusiastically in the universal commendation of the epoch-making work of my own teacher, Hilbert, I quite frankly differ from those who feel that this work can be adapted to the uses of the high school. Let me not invite discussion by expanding upon a question of opinion here, but rather let me explain an application to the traditional course.

Respecting thoroly the opinions of those who would revise the elementary course to rigid logic, I may certainly say, without fear of contradiction, that we are forced to one of two positions: either we must accept the suggestion of revision to rigid logic, or we must abandon the claim that the theorems are all derived from the axioms by logic alone, without the aid of intuition. I have said that I personally prefer the latter alternative,

and that I would personally accept the intuition as a legitimate factor in producing results in geometry.

To my mind it seems highly desirable from a pedagogical standpoint that this view prevail. In fact, I believe that psychology would indicate that proper progress on the part of the child cannot be expected unless the intuition is developed—in fact, unless intuition and conception of space actually precede logical proofs. Similarly, while, logically, definitions may actually precede any conception of the entity to be defined, it is unquestionably better psychology *first* to acquaint the learner's mind with many special cases and with many class-characteristics before logical definition is attempted. Thus the long lists of definitions in the first pages of many textbooks are out of place.

III. A PLEA FOR GEOMETRY

What I have just said leads me to distinguish sharply between geometry on the one hand and formal logic on the other. I would emphasize that I have said *formal* logic. Indeed logic enters of necessity in geometry, and no sane person would remove it; but there are many other subjects which depend upon consecutive reasoning—i. e., which fundamentally employ logic. In fact, algebra or trigonometry are just as dependent on logic as is geometry.

But in geometry alone has formal logic held such sway; we unconsciously associate geometry and formal logic to a degree unknown in any other subject. If in what follows I urge that we do less of this, I wish to state clearly that it is the formality of the logic and not the logic itself with which I would dispense.

Thus, I would not lower our geometry to the standpoint of mere drawing or of the so-called concrete geometry, nor do I agree wholly with the recent attempts to make geometry experimental or inventional in character, not because this latter principle is not good in its place, but principally because it has been overdone. There is no need to depart very far from the traditional matter to form a suitable course, tho great changes in the method of imparting that matter seem desirable.

The real need is to phrase our language in the best possible way to convey to a child our meaning. Second only to this is a more frank and serious attitude toward the importance of the various topics. Perhaps I should in general indicate also a belief in a rational use of the experimental or inventional methods whose misuse I have just criticized. Such methods, used on proper occasions, would be helpful, tho no such method can hope to accomplish the purpose of the more important matters which I have just mentioned.

As an indication of my intention, let me suggest the following language in the proof of a typical theorem.

If two straight lines intersect, the vertical angles are equal. For, with the lettering of Fig. 1, $\angle AOB + \angle BOC = \angle COD + \angle BOC$, since each of these sums is 180° . Hence, canceling $\angle BOC$, we have $\angle AOB = \angle COD$. Likewise $\angle AOD = \angle BOC$.

It is to be noted that I have not dispensed with logic in this statement, tho the language is informal: I have sacrificed only the formality of the logic, and that in order to gain in clearness and intelligibility. It seems to me that this clearer informal logic will go far toward rendering geometry more valuable to our students and to our system of instruction.

As for formal logic, if that be desired, a special course may be offered, or it may as well be attached to almost any other subject in the curriculum. In fact I believe we should ultimately gain if we were forced actually to shorten the whole work on both plane and solid geometry to one year, if we could study geometry as we do any other subject—for its own sake, and not for the benefit of some auxiliary subject—thus giving over, if need be, the last half-year of our traditional one and one-half years to a course on pure logic, which might or might not be taught by a professional mathematician.

Let this, then, be a plea for *geometry*, which is indeed a much-neglected subject,

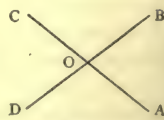


Fig. 1

lost in a mass of entanglement with a totally different subject—pure or formal logic. My plea is, not that pure or formal logic be absolutely abandoned, but that at least a portion of the usual time be given to geometry alone, freed from the confusing intermixture with a quite different subject.

IV. RELATIVE IMPORTANCE

I have spoken of the necessity of carefully considering the true importance of the various topics. If my plea for geometry for its own sake has weight with you, our minds will be cleared in considering questions of importance from that standpoint alone.

Thus, I feel sure that theorems have frequently been thought important because they so well illustrate certain formal processes of logic. May we not, at least just now, lay this consideration aside and note the real *geometrical* importance of certain theorems?

Among those which come early in the work, I would mention particularly the congruence theorems for triangles. These theorems are not especially distinguished from many others on their logical side, and I presume that the very ease with which they are proved often leads both teacher and student to spend less time and effort upon them than, for example, upon the theorems on the orthocenter, circumcenter, and so on. If we consider their real import, the congruence theorems are of course immeasurably more vital and valuable; from the standpoint of pure geometry, they deserve ten times the attention and effort which should be expended on the “center” theorems.

But, one asks, what can be done after the very short work of proving these congruence theorems is past? I would answer that these theorems form the whole basis of trigonometry. Indeed, the theorems on similar triangles also are necessary for trigonometry: here again are theorems of far-reaching importance in every application of mathematics. Can we not profitably introduce as applications of these two important sets of theorems certain simple trigonometric facts? Can one doubt that Euclid *would* have done so if he had been in possession of these facts? I do not mean to introduce complex formulae. As an application of the congruence theorems, we might readily have the pupil actually construct with ruler, compass, and protractor, various triangles with given parts, and measure the unknown parts with the same instruments. Is this not the *spirit* of trigonometry, and will it not lend new life and meaning to these theorems in the pupil's mind? After the theorems on similar triangles, might we not conceivably define the trigonometric ratios, and actually make a small table by measurements? To my mind even the solution of right triangles by means of a small table would be very legitimate, and need not consume more than two days' time—which is the amount of time I regularly spend in reaching that point in teaching trigonometry itself.

Among the other important theorems are the Pythagorean theorem, the theorems which lead to methods of construction, the mensuration theorems, and many others. These I must now pass over for lack of time.

I would mention still one phase of great importance—the connections with algebra. Such connections can be and have been made by means of the mensuration theorems. Another possible connection is thru the graphical methods now common in elementary algebra. Since these methods are now coming into practically universal use, it seems needless to exclude them from geometry, where their application is legion. Surely Euclid would have employed them. Such curves as the parabola are now known to many students even before they enter geometry. Some of these simple curves might be mentioned hastily, tho the main topics would remain the same as at present, with a possibility, at least, of occasional demonstration of theorems by means of the algebraic-graphical processes.

V. CERTAIN ERRORS AND FALLACIES

I mentioned above the failure of absolute logic in the traditional system. It is certainly fitting that we should recognize this and that we should not strain ourselves to prove a theorem with absolute rigor, if that proof is obviously beyond the grasp of the

student. Attention has been called repeatedly to several instances of actual fallacies in our present textbooks, notably in the theorems regarding the so-called incommensurable cases. Suffice it to say here that these theorems are relatively unimportant, since we are speaking of a course in which intuition must necessarily play a part, and these incommensurable cases fall well within the scope of a child's intuitional powers, if he is not confused by long-drawn-out and really fallacious discussions of them. I may add that the same question, the incommensurable, or irrational, case occurs in several theorems aside from those in which it is usually treated: in the definition of area, for example, and in theorems on similar triangles, the incommensurable, or irrational, case exists just as truly as in any case. It is important to note that it never gives rise to any trouble or confusion in the instances in which it is simply ignored in our traditional textbooks.

The all-mastering desire to live up to a Jack-o'-the-lantern principle of strict logical deduction has led authors, teachers, and pupils into a quagmire of erroneous proof which we may escape by the simple expedient of frankly admitting the existence of intuitional conclusions in such relatively unimportant matters, which are at best, to a child, mere quibbles over finesse in which he can see little real significance.

VI. THE RECONSTRUCTED GEOMETRY

To recapitulate, I would urge that *formality* in logic be dropped from geometry, and that geometry be treated strictly for its own sake.

I would, moreover, emphasize the logic, informally, much as before, with the one exception of intuitional conclusions in unimportant or excessively difficult matters. For example, I would insist that a student grasp the power of the *reductio ad absurdum* process—not formally, but as a live method of argument on any topic whatever; so that, for example, the statement: "Someone has entered this room, for if no one had been here, this book would not have been moved," is instantly recognized as a true *reductio ad absurdum*, tho it is not stated in terms of steps, hypotheses, conclusions, major and minor premises, and so on. Is it not true that even the logic the student learns will be of greater real value and significance to him if it is phrased in language which he can grasp, and which at least faintly resembles the forms of ordinary speech?

I have also urged the relative importance of certain topics. While I have mentioned several, I chose to speak in detail on two of them: the congruence and similarity theorems in connection with elementary bits of trigonometry; and the uses of algebra, particularly in connection with the so-called graphical processes. While the other topics I mentioned deserved equal notice, you will see that I had at least one purpose in selecting these two illustrations.

VII. GEOMETRY THE BOND OF A UNIFIED MATHEMATICS

For geometry may and doubtless will serve as the vital bond of a unified mathematics, connecting firmly the various topics whose disjunction we have all deplored, and whose correlation has been so earnestly, if often mistakenly, sought. I have indeed indicated two strong bonds with algebra—in the mensuration problems and in demonstrational and expository work by means of the algebraic-graphical processes.

The latter suggestion constitutes also a bond with the subject of analytic geometry, of which the processes called graphical are a small elementary excerpt. Indeed analytic geometry is in itself the very embodiment of correlation between algebra and geometry.

I have also indicated a strong bond with trigonometry in the congruence theorems and in the similarity theorems on triangles, which, taken together, forecast the entire spirit of that subject.

Thus algebra, arithmetic, geometry, trigonometry, analytic geometry here find a natural and powerful bond in plane geometry—curiously the subject which has been more than any other isolated from all contact with other mathematical subjects. Even the calculus itself finds its most accurate forecast in the proofs of the mensurational theorems of geometry.

If I have urged that geometry be torn away from its traditional correlation with formal logic (i. e., with the formalities of logic) I have done so only to attain this greater and more desirable correlation between the various branches of mathematics itself. Should we not rather part company with formal logic and metaphysical finesse, to join hands with our natural mathematical brethren, and take our stand, as a unified subject, rather in the ranks of general science than in those of the moribund metaphysical studies?

VIII. CONCLUSION

In conclusion, let me say that it seems to me that my remarks are in tune with the spirit of the age. We must come to a saner and more practically useful attitude in all of our mathematics, or we shall be pushed to the wall; already is to be heard a not uncertain demand that mathematics be not required in high schools, and this will inevitably come if the mathematical topics be allowed to fall into the disrepute of being merely useless playgrounds of the imagination.

Dangerously near this has come our work in geometry. Frankly, as now taught, geometry, of all our subjects, is the one which we feel of least real use in further mathematical or scientific work; as now taught, geometry, of all our subjects, is felt by students and by many thoughtful teachers to be of least benefit to the child who never pursues advanced studies.

May something of what I have said fall on fruitful ground, and may geometry regain her former glory and prestige as the unifying center of mathematical thought, as the queen of the science, so that once more we may without pretense or insincerity write, as of old, above our portals:

"Let no one who does not know Geometry enter here!"

THE REAL-PROBLEM MOVEMENT IN ITS RELATION TO THE TEACHING OF GEOMETRY AND ALGEBRA IN SECONDARY SCHOOLS

JAMES F. MILLIS, HEAD OF THE DEPARTMENT OF MATHEMATICS, FRANCIS W. PARKER SCHOOL, CHICAGO, ILL.

The real-problem movement is an attempt to reform the teaching of secondary mathematics by teaching the different subjects in relation to their uses in solving the real problems that are actually encountered in life. Instead of teaching algebra and geometry, as has always been the practice, as pure sciences, almost entirely abstract in nature, and with practically all of the applied problems that are used artificial ones, made up to illustrate the principles and processes involved without reference to their reality in actual life, it is proposed to gather up and use in the classrooms of the secondary schools, as far as possible, the genuine applied problems of algebra and geometry that are actually encountered in the activities of boys and girls, in ordinary everyday life, in the sciences and arts, and in the various practical industrial vocations. Algebra and geometry are to be looked upon by the pupil, not primarily as pure sciences to be studied for purposes of mental discipline, altho, however taught, they must be developed into scientifically organized bodies of knowledge and must furnish this discipline; but are to be looked upon rather as tools to be used in doing the world's work. The subjects are to be so taught as to give a true and adequate conception of their uses in the various practical fields of activity. The use of these real applied problems, containing a content of human interest in themselves, in the school work, in place of so many abstract and artificial drill problems, will lend motive and interest to the work. Without this motive and interest, the study of the subjects cannot be educative. Furthermore, study which is not made to function in the actual life of the individual—knowledge not used—is without educational value. So it is believed to be the duty of the school to assist the knowledge of algebra and geometry to function by teaching the pupil to use this knowledge while still in school in the solution of the problems actually encountered in practical life. This is a brief and superficial statement of what the real-problem movement is.

Viewed in its relation to general educational theory, the movement has to do with the great problem of educational waste in the teaching of secondary mathematics. This problem is a general one, and is being attacked in other fields of education. It is the problem of the maladjustment of the curriculum to the needs and interests of the pupil.

Algebra and geometry were at one time college subjects, and in the growth of educational institutions have been handed down to the secondary schools from the colleges. As taught in the colleges and universities, these subjects were abstract, deductive sciences. When they were introduced into the secondary schools they preserved their old content, were looked upon from the same point of view, and continued to be taught as pure sciences.

These subjects, as taught, stand today as representatives of the old idea of education that is now obsolete, namely, the idea of education as a *discipline*. In the early universities of Europe mathematics was taught as a means of training the logical faculties of the mind, with the aim of developing the power of disputation; and down to the present time, the fundamental idea in the teaching of algebra and geometry in the secondary schools has continued to be the old idea of mental discipline.

In this old theory of education the present interests and needs of the individual are not taken into consideration. These are sacrificed for the sake of the future. Education is made primarily a preparation for the future.

But the modern theory of education that for over seventy-five years has been revolutionizing the arithmetic teaching in the elementary schools has begun to exert influences also on the teaching of mathematics in the secondary schools. As opposed to the disciplinary idea, education is seen to be growth or development of the individual from within—it is the process of living itself. The emphasis, therefore, is placed upon the present needs and interests of the pupil, rather than upon preparation for the future alone. This growth of the recognition of the individual, with his needs, interests, and activities, as the center in the teaching process, has brought about almost a complete transformation of arithmetic in the elementary schools within the last few decades. In the teaching of mathematics in the secondary schools it demands equally radical changes.

We are seeing and have seen, therefore, many reform movements in the teaching of algebra and geometry, with a view to adapting these subjects to the needs of secondary-school pupils.

All of these reform movements have been confined largely to solving the problem of waste and inefficiency in the teaching of algebra and geometry by improving the methods of instruction or by reorganizing the traditional subject-matter within the curriculum. But this problem of waste will not be completely solved until the content of the curriculum itself is changed in nature. The point of view in teaching algebra and geometry in the secondary schools must be reversed. These subjects should not be taught as so much preparation for the future, to the total disregard for the pupil's interests and needs of the present. The subject-matter should not be wholly abstract and generalized, but should have a content that to the pupil is concrete and full of human interest. It should relate primarily to, and grow out of, concrete living situations vital to the pupil—either situations encountered in his own activities or in his observation and study of the larger activities of the world. It should emphasize the dynamic side, the *doing side*, of life. The subject-matter of algebra and geometry should represent the mathematical element of real human experiences. It should not be completely divorced from these experiences, as it has been, but taught in its relation to them. The applied problems should be *real* in the sense that they are actually encountered in human experiences, and they should be *concrete* in the sense that they appeal to the actual experiences of the individual pupil.

The approach to the subjects should be thru the medium of real problems. The starting-points thruout the work should be real living situations. Only thus can the work be truly motivated and hence educative. Out of this study general principles and processes are deduced, and the sciences of algebra and geometry built up in the form of organized knowledge in the pupil's mind. But every generalization, every theorem, every

topic developed, should end in applications in the solution of real applied problems. The educative process *begins* and *ends* with experience. In the traditional teaching of algebra and geometry, we have left off the beginning and the end of the educative process, and given the pupil only the middle step. We have neglected to relate the thought material to actual experience anywhere in the work.

Still another word should be added on the deeper significance of the real-problem movement. The fundamental principle in the educative process is that of *self-activity*. Mental development comes only thru self-activity of the individual pupil in solving situations that for some reason are to him concrete and vital. For education to take place, there must be a problem which is *the pupil's own problem* demanding solution. This is the starting-point in all education. In its final analysis, education is the solving of problems that are real and vital to the pupil. For any bit of work to be educative, it must fill an actual felt need on the part of the pupil. For any bit of work to be educative, there must accompany it the positive feeling on the part of the pupil that this work is going to further the self, the positive conviction that the knowledge is going to function in some way in his future conduct. This is what is meant by saying that all school work must be motivated. Not only is this motivation an absolute essential in all educative activity, but the knowledge developed must be such as is certain to function in living conduct.

Here is where the traditional teaching of algebra and geometry has largely failed. The study has neither been motivated nor made to function. The remedy lies in the building-up of a new content for these subjects, in building up the subjects about real living problems that the pupil has a real felt need for solving, and that are actually encountered in life and for that reason are most apt to function in the individual's life in some way, either in doing things directly himself or in understanding the laws and processes of the larger industrial world. On the side of educative process, the teacher must put into every situation for the pupil a real problem. Every day's work in algebra and geometry must grow out of, or relate to, problems that represent felt needs on the part of the pupil. The subjects must contribute to his living now, as well as to preparation for the future. On the side of content of subject-matter, the teacher must arrange for the pupil a series of real problems, interspersed with the proper amount of supplementary drill material for developing organized knowledge and technique, in which, by the self-active process in solving these real problems, the pupil develops along certain lines to definite ends of individual and social efficiency. The problem in the teaching of algebra and geometry is the general problem of all education, of how to organize the instruction so as to provide for thought to function in practical, living conduct—now as well as in the future.

I have spoken at some length of the significance and fundamental importance of the real-problem movement. A word may be said as to the practical possibilities of this movement in actual school work in the near future.

I believe that the actual ultimate possibilities along this line have not even been contemplated in this country. The movement is now not much beyond its incipient stage. Last November the Central Association of Science and Mathematics Teachers appointed a committee which was instructed to investigate the possibilities of gathering up the real applied problems of algebra and geometry in everyday life, in the sciences and arts, and in the various practical industrial vocations, and of using them in teaching the subjects in the secondary schools. This committee has been at work during the year, and will make a preliminary report next November. Since last March the committee has been printing every month in *School Science and Mathematics* several pages of real problems that have been collected from various fields. These problems are typical of those found in the activities of boys and girls, problems in manual-training work, in physical-science work, in athletics; problems in mechanical engineering; civil engineering; architecture; the various building trades, such as carpentry, masonry, etc.; marine surveying; navigation; elementary astronomy; agriculture; forestry; mechanical drawing; designing; pattern-making; sheet-metal work, and many other practical fields. It is

aimed thus to start the collection of a fund of these real problems, and to make them accessible to teachers of secondary mathematics everywhere for class-room use. An article of mine in the March, 1909, number of the *Teachers College Record*, New York, contains eighty-odd real applied problems in geometry that are accessible to teachers.

The brief experience of those who have been engaged in this investigation has revealed the fact that elementary algebra and geometry do have many real direct applications in the various practical fields of human activity, such as those just mentioned, applications of an elementary nature that may be used in the secondary school. In a few years of careful investigation it should be possible to gather together enough of these real problems completely to transform the content of the curriculum in elementary algebra and geometry, and at the same time to furnish the pupil with a considerable insight of great value into the larger life about him.

The work of collecting this material and of adapting it to schoolroom uses is an undertaking of great magnitude. It must be the work of many interested and co-operating hands. Not a small part of this movement must consist of experimentation on the part of teachers of the subjects everywhere in order to see what kinds of the real problems collected are best adapted to the interests and experiences of secondary-school pupils. Teachers who are not in a position to aid substantially in the collection of the material can render great service by experimenting earnestly with the material that others collect with a view to assisting in its adaptation to the needs and capacities of boys and girls. Even if for the present the great body of teachers must find it inconvenient to break away from the idea of teaching algebra and geometry as pure sciences, primarily for purposes of mental discipline, every teacher in the country can at least, as an expedient, use the good real problems that are collected and published in various places in place of so many of the traditional abstract and artificial problems that are now used as exercises in the textbooks.

It may be foreseen now that the investigation of the various practical fields where elementary algebra and geometry are used will result in a redistribution of values in these subjects. The relative usefulness of the different parts of the subjects where they are applied should determine to some extent their relative value in the secondary-school course. Certain topics of elementary algebra, for example, which find no applications in practical work, should be eliminated, or at least given less prominence in the secondary schools, where the great body of students will never have occasion to pursue more advanced courses in mathematics, and will leave the secondary school directly to enter upon some practical vocation.

Some of the traditional matter, such as the elaborate treatment of the theory of limits in elementary geometry, and the splitting of hairs over certain fundamental notions which is a total waste in the secondary school and tends to confuse and obscure what otherwise would be clear and rational from the individual's experience, should be eliminated. The time usually devoted to this would be better spent on the practical applications.

The real-problem movement should furnish thus a true basis for the eliminations and choice of subject-matter in the curriculum. It should furnish a sound basis for the unification of the different subjects of mathematics in the secondary schools, as I have attempted to show on another occasion. It should contribute much to the simplification and proper organization of the subject-matter within the curriculum. If teachers everywhere will lend an earnest hand in this movement, they will make of algebra and geometry, by adapting their content to the real needs of boys and girls, the genuine educative subjects that they should be.

DEPARTMENT OF HIGHER EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—FRANK STRONG, chancellor of University of Kansas, Lawrence, Kans.

Vice-President—W. F. BOOK, professor of philosophy and education, Univ. of Montana, Missoula, Mont.

Secretary—FRANK E. THOMPSON, professor of education, State University, Boulder, Colo.

FIRST SESSION.—TUESDAY AFTERNOON, JULY 6, 1909

The Department of Higher Education met in the Assembly Room of the Central Christian Church, at 2:30 P. M., President Strong presiding. As the secretary elected at the last meeting was absent, on motion, Frank E. Thompson, of the University of Colorado, was appointed secretary pro tem.

The first address was by President Albert Ross Hill, of the University of Missouri, on the topic, "Has the American College Failed to Fulfill Its Function?"

Professor Samuel Wendell Williston, of the University of Chicago, followed with a paper on the same subject. The general discussion was spirited and comprehensive.

President Strong appointed the following committee on nominations:

C. A. Duniway, president of University of Montana, Missoula, Mont.

G. W. A. Luckey, professor of education, University of Nebraska, Lincoln, Nebr.

Arthur H. Guinn, University of Pennsylvania, Philadelphia, Pa.

SECOND SESSION.—THURSDAY FORENOON, JULY 8, 1909

The topic for discussion at this meeting was "How to Develop Properly the Inner Community Life of the College or University." Papers were read by Charles Fordyce, dean of the Teachers College, University of Nebraska, and John Hanson Thomas Main, president of Iowa College. A full discussion followed.

The Committee on Nominations made the following report:

For *President*—George E. Fellows, president of University of Maine, Orono, Maine.

For *Vice-President*—Charles E. Bessey, dean of College of Science, University of Nebraska, Lincoln, Nebr.

For *Secretary*—Frank E. Thompson, professor of education, University of Colorado, Boulder, Colo.

This report was adopted and the nominees were declared elected. The department then adjourned.

FRANK E. THOMPSON,
Secretary pro tem

PAPERS AND DISCUSSIONS

HAS THE AMERICAN COLLEGE FAILED TO FULFILL ITS FUNCTION?

[AN ABSTRACT]

I. ALBERT ROSS HILL, PRESIDENT OF THE UNIVERSITY OF MISSOURI,
COLUMBIA, MO.

It is assumed that this question refers only to colleges of arts and science, not to professional colleges.

Society needs the leadership of a few of greater social insight and responsiveness—in short, of greater social efficiency than the elementary and high schools can furnish. Society therefore needs an institution for the education of those in the later years of youth, “to teach in the broadest way the fine art of living;” to bring young men and women to an appreciation of the great values of life; to stimulate their social imagination and to train them to habits of social responsiveness.

To accomplish these ends, the college must provide: First, sufficient range of studies to introduce students to the most typical forms of human experience and human interests; second, an atmosphere, catholic in spirit, earnest and sincere in purpose, and permeated with a proper sense of values and the deepest convictions of the social consciousness; third, opportunity to associate with persons, both fellow-students and teachers, of worthy interests and noble lives.

The most prominent criticisms, with suggestions for improvement, are: First, lack of motivation. This is a common weakness in colleges, high schools, and elementary schools. The old college met the social conditions of the time by giving an effective preparation for the three kinds of social leadership and service that the times demanded—viz., in the professions of law, medicine, and the ministry, and its students had definite purposes. But the social situation has greatly changed; social conditions have grown much more complex, and the forms of social service greatly increased in number and variety. The modern college has provided wealth of opportunity for persons preparing for varied forms of social service, but it lacks organization of its material. One remedy may be found by utilizing more definitely the vocational motives of youth. These motives are worthy, and it is quite possible while meeting them to satisfy the claims of culture, for culture is not inherent in particular forms of subject-matter but is a by-product of the educational process, and represents an attitude of mind and life rather than a particular kind of knowledge. These vocational claims may be recognized without introducing additional courses in colleges, by organization of those now offered, and especially by advice to individual students in their selection of courses in groups. Probably the chief reason why women students in college are usually more earnest is due to the fact that the majority of them are planning to use their education in teaching or some other pursuit. Fewer of them are drifting thru the college course.

Another way by which definiteness of purpose and motive may be supplied in college work is by a greater appeal to the native curiosity of youth. This may be accomplished by a change of method in instruction rather than by a change of subject-matter. A love of learning should be one outcome of college training, and this is but the finished form of what I refer to as native curiosity.

A second criticism is directed against the amount of loafing among college students. Recent years have seen a great growth in the number of students who avail themselves of college courses, and whereas, formerly, only those took a college course who intended to enter one of the so-called learned professions,

today many students in college are looking forward to business and commercial pursuits. College authorities are often led to tolerate superficial work on the part of these students on the theory that a man may get preparation for a business career thru taking part in student activities and by mixing with men. In some quarters college professors have even gone the length of declaring with reference to the college course, that "it's better to have come and loafed than never to have come at all." Now I have no sympathy with this viewpoint. It is the business of the student to study, and to tolerate any other ideal in college life is to encourage irresponsibility, superficiality of intellect and of character.

A third charge is directed against the prominence of athletics, student activities, etc., and it is claimed that these have usurped the place of scholarship in student honors. Now there certainly is needed less glorification of and emphasis on intercollegiate success, and more on widespread athletic activity among the students of a particular college. In addition to this some means must be found of magnifying the importance of scholarship and earnest work. I would suggest the introduction of something corresponding to the honor courses in the English and Canadian universities. There, at the close of the second year of college work, the strongest students are permitted to select each his own course in which to work for "honors." Students in these courses are given certain liberties and are thrown upon their own resources and own initiative. They thus develop independence and a genuine love of scholarship. The brilliant man is thus stimulated to do his best, while the general course is adapted to the needs and abilities of the average student. The "honors" thus won stand to the credit of the student for all time, his name appearing in future university catalogs with the supplement, first-rank honors, second-rank honors, or the like. These honors are, of course, more enduring from a social standpoint than any athletic or social honor.

A fourth criticism states that university ideals and methods have undermined college ideals. Now, it is true that some university specialists tend to be too technical in their instruction for freshmen and show lack of perspective in courses of a general nature, but it is not true that the real spirit of discovery and research characteristic of the university is unfavorable to vital college teaching; in fact, the colleges that are parts of universities are today probably suffering less from the weaknesses above referred to than those that are isolated, with the exception of the athletic craze. The academic students in the state universities are among the most serious students that are to be found in America today. The complexity of life found in these universities, and the fact that so many of their students are taking professional and technical training, provides an excellent environment for the realization of the fundamental purposes of the college.

Fifth, too little attention is given to individual training, we are told. Now the classes are not much larger in the colleges today than they were formerly and individual teachers know as many students as those of the older small

college; but the spirit of individual training is probably somewhat lacking and must be supplied by tutors, advisers, fraternity leaders, and in other ways.

The modern college has made a serious effort to adjust its program and methods to the changed condition of society. It has not utterly failed, but has not, as yet, fully succeeded. It has, to some extent, drifted, and its program is as yet chaotic. It has provided election of studies without system and left the individual to work out his own salvation before he was mature enough to arrange his courses wisely; but the educational conscience is awake among the college men, and we may look for an organization adapted to modern conditions, such as will bring definiteness of purpose to the student, clearer perception of the meaning of culture to the faculty, and result in the building of institutions capable of fulfilling adequately the functions of college education.

HAS THE AMERICAN COLLEGE FAILED TO FULFILL ITS FUNCTION?

II. SAMUEL W. WILLISTON, PROFESSOR IN THE UNIVERSITY OF CHICAGO,
CHICAGO, ILL.

Has the American college failed to fulfill its function? In the United States there were, the past year, less—considerably less—than one hundred thousand students in attendance upon the colleges of liberal arts, of whom perhaps fourteen thousand graduated, out of the more than eighty millions of our population, out of perhaps seven million young men and women of college age. Unless we assume that the so-called liberal education is of use to less than 2 per cent. of our people, we must admit that the American college has failed as a popular institution of higher education. Evidently, then, in the first place, the American college is not fulfilling its whole function because of its narrowness; because, while for the most part supported by the whole people, it affords its direct benefits to but one-tenth of 1 per cent. of them.

A single correspondence school, one of the many real people's colleges which have sprung up lately, has, during the past ten years, accumulated more than one-third the endowment of Harvard College, and is helping a larger number of young men and women in higher education, and probably doing quite as much good for the people of the United States as that institution, which numbers its years by centuries. Do not this and similar schools furnish sufficient evidence of the earnest desire of our young people for higher education? They do want better educational training than they have been able to obtain in our schools, millions of our young men and women, but they do not want that kind which our colleges are giving, nor can they afford to pay its cost. It may be objected that, since 1890, the growth of our colleges has been very great, that they have done all that they could with the means at their command, that eighty-five thousand students in the college of liberal arts are about all that the eighty-five million inhabitants of our nation can care for. I cannot accept this as a valid excuse. We do not demur greatly at the purchase of a few additional war vessels each year which cost more

than would be required to endow in perpetuity colleges for the care of six or eight thousand students. Of course it may be more necessary to build a Dreadnaught than it is to educate one or two hundred thousand students, for that is what each vessel means. Perhaps the largest college in America, that at Valparaiso, Ind., has grown as it has, almost without endowment and without aid, largely because it keeps close to the common people. Some of us are inclined to sneer at it, but I wonder if it is not imparting some useful lessons which we shall appreciate by and by. Whenever the American people are assured that education is worth what it costs there is always a generous response. The only reason why there are not a half-million students in our American colleges today is because the people believe that college education is not worth what it costs. The fault largely lies with the college—we cannot deny it. As college administrators, we are, the most of us, always behind the times. Improvements and changes have to be forced upon us. Not until the college meets such dangers as now confront it, does it seek seriously to solve the problems which should have been met and disposed of long before. Not until the industrial schools, and especially the agricultural schools, business schools, correspondence schools, and the like begin to make inroads on what it has hitherto deemed its own peculiar province does it awake to a realization of its own shortcomings. Not many years ago Yale College sneered openly and unequivocally at Sheffield Scientific School; it does so no longer; it is now jealous of it. How long it took for some of us to be convinced that most young men and women would not come to college at all if they were compelled to spend many precious years in the study of Greek and Latin for culture's sake exclusively! How long it took for some of us to admit that a study should not be excluded from the college curriculum because it might be made of direct use in earning one's bread and butter!

But a college may be conservative, it may even be illiberal, desiring only a very narrow field for work, and still nobly fulfill its mission, if it only permits and encourages others to do that which it refuses to do itself. There are far more serious charges now laid against the American college than illiberality, than conservatism. It is not doing the work which it attempts to do as well as it did its work formerly; its teachers are, on the average, paid less; its product is, on the average, not of as high a quality as it was formerly; its failures are proportionally more numerous. In other words, it is said, and I believe with very much truth, that the American college is declining in value as an efficient trainer of our youth. And these are the specific charges: first, that fully 50 per cent. of our college students either fail or drop out on the way; second, that the mental discipline received by the average student in the college of liberal arts—that is, his ability to concentrate, his capacity of apprehension, his attentiveness to duty—has deteriorated; third and most important, that there is a deterioration in moral discipline, that immorality is more widespread among college students than ever before, that there is more intemperance, more fornication, more dissipation in general than ever

before. If the second of these charges be true the third would naturally follow, for neglect of duty is merely a precursor of moral decrepitude. I myself am not so sure that our colleges have all grown worse in this last respect. I do not believe that vice is more prevalent among the older institutions than it was thirty years ago, but I do feel quite sure that many—very many—of the newer institutions are falling to the level of the old. While students were, in general, poor in worldly means, the ambition to obtain a better education kept them from vice. Such students are now in increasing numbers seeking their training elsewhere than in the college of liberal arts.

We are passing thru a period of great educational unrest. There is much dissatisfaction among the people, among ourselves as college men, with the results of modern education—that is, non-professional education—from the bottom up. And the entering wedge of this unrest was driven not many years ago in the elective or optional system introduced at the behest of the people who were no longer satisfied with the older methods, who began to demand something else of the college of liberal arts than the exclusive preparation of preachers, lawyers, and gentlemen of leisure. It marked the beginning of a rejuvenation of the college after a period of decline ending with the eighties. Beginning at the top, the elective system has gradually permeated downward thru the high school into the elementary school. None has been a more sincere believer in college electives than myself. I remember only too well my own college days and their incessant drill in Greek, Latin, and mathematics. I have believed in college electives because they seemed to me, as to many others, the only possible escape from culture ruts, the only way of vitalizing modern education. But I have also seen for many years past, as have others, and have protested against the grave evils the elective system has brought along in its train. I believe that the time has come when these evils must be squarely met and overcome, if the colleges as colleges are not to end in utter dissolution. To the earnest boy, the ambitious boy, the thoughtful boy, he who has wise advice and helpful guidance, the system of electives is of incalculable advantage; it is he who is more than justifying it; it is he who finds in the American college of today all its splendid excellences. To the idle boy, the thoughtless boy, the irresponsible boy, the word electives too often spells ruin. To nibble at many viands, going hither and thither as fancy wills, may be a delectable kind of educational alimentation, but it is almost sure to end eventually in intellectual indigestion and functional incapacity. I am quite safe in saying that today the chief defect of the American college is lack of discipline, a lack quite unavoidable under present conditions, a defect which will surely continue to increase with the increasing prosperity of our nation and its increasing prodigality of expenditure. I fancy that I hear him who was never quite convinced that the old régime was not the best after all say, "I told you so!" The old curriculum did give discipline, both mental and moral, we cannot deny it; there were fewer wrecks, less failures, better fitness for the work of life—tho in well-trod fields—in the

graduates as a whole, but with fewer possibilities of the highest usefulness. There are some even now who urge that we should go back to the old system. If this should mean making the college course for every student compulsory I agree with them, but if it means that there should be but one course and that the olden one, then I emphatically disagree. The change was as inevitable as the loom or the telegraph; as well go back to the mail coach. Who of us who have taught both professional and non-professional college students but know, and thoroly know, how great, as a rule, is the difference between them in earnestness, in application, in almost everything which goes to make the successful student and man. The professional student knows that no excuse of any kind will be accepted for failure or poor work; that his whole future depends upon his faithfulness to duty; that not even his diploma will suffice, if he be a physician or a lawyer, because the state will examine into his fitness finally, and the state has no sympathy to waste upon the sluggard and the dissolute. Suppose that every bachelor of arts were compelled to pass a state examination before receiving permission to make use of his college education in gaining a livelihood. What a mighty change would soon come over our colleges! The professional student must spend from eight to twelve hours daily in real work, for at least six days in the week; the college student who works as hard is an exception. The professional student has no time for football and professional athletics. Do you know of many medical football and baseball teams? His professors never have to worry about professionalism in athletics. Harvard College has lately had the rare honesty to admit that her students in general devoted but little more than three hours daily to their ostensible duties, but Harvard College often wins in the athletic field and on the Thames. The Bachelor degree today means far less than it did formerly to its possessor; it no longer opens the door very widely to him, nor does it save him from disgrace if he prove unworthy. He usually forgets in a few years that he has it save when he attends the periodical reunions of his class and roots for his alma mater.

And some of this lack of discipline is doubtless due to that demoralization induced by the unwholesome rivalry on the part of our institutions for more students. At least the Carnegie Foundation makes this charge, and I believe the charge to be true. The Universities of Illinois and Ohio, according to the newspapers, have lately been refused participation in the benefits of the Foundation because of their low standards and laxity of discipline; and a like charge is made in general against most of the state institutions; and the University of the City of New York was plainly told that it is very, very bad. But, lest that the pot should call the kettle black, Harvard and Columbia were also warned that they would better have a care themselves. Not only is there an undignified rivalry among the different institutions themselves, but there is also, as a direct outcome of the elective system, far too much rivalry among the different departments of the college itself for students. The conscientious teacher, he who demands hard work from his students, is

too often shunned. He attracts, usually, only the earnest students, and they are in the minority.

We have been trying to leaven the mass of education from above downward. We are now about ready to try the more natural way of beginning below to leaven upward. And this leavening I believe would have been accomplished before now, or at least have been far on the way toward accomplishment, had it not been for the college itself. We have made two indictments against the college: narrowness and illiberality as the one; lack of mental and moral discipline as the other. The third is the gravest of all: that it has prevented the proper growth of the high school; that it has warped and distorted it from its best uses. Today there are less than one million students in all the high schools and academies of our country. That is, less than 5 per cent. of our boys and girls under eighteen years of age are receiving the benefits of a secondary education—but little more than 1 per cent. of our population. Who is there who has not observed with astonishment and indignation the small number of graduates of our high schools, and they chiefly girls? While we may doubt the wisdom of every competent boy and girl seeking a college training, is there one of us who contemplates with equanimity the awful social and economic conditions which shut out from the schoolroom the great, the overwhelming mass of our children—full twenty millions of them—at twelve or thirteen years of age, or earlier, to send so many adrift into the office, workshop, factory, street, and mine? One million, seven hundred thousand of our boys and girls between ten and fourteen years of age—nearly twice the number of those in our high schools—are working for gain, in very large part in factories and mines. I know that there are some who insist that these deplorable things are the results of economic conditions which we can never expect to change; that, so long as the world lasts, there will and must be haulers of water and hewers of wood. Can we doubt, however, that some vocational education for every boy and girl till he or she has reached the age of at least sixteen years, under good discipline, would be of economic value to our country, that it would save much of the crime and much of the misery now so appalling in their magnitude? If it be socialism to say that every boy and every girl should be educated, if necessary at the expense of the state, till he or she is sixteen or seventeen years of age, then I am a socialist. Possibly the dividends on the watered stock in our monopolistic trusts would suffice to give that education. If we college men are honest, I believe that we will hold ourselves accountable for one of the causes of this failure in secondary education. Even more, within the past few weeks the Committee of the Board of Education of Chicago, whose duty it was to inquire into the faults and defects of the elementary schools of that city, gave, as the first reason for them, the “dominance of the college.” Mr. R. T. Crane, certainly an able business man of Chicago, who has interested himself greatly in the manual-training schools of that city, has recently expressed himself vigorously—even violently—in opposition to the college and university,

as injuring more young men than they helped. There is danger that an increasing number of such men as he shall become enemies of the college.

Slowly this control of the college over the high school is slipping away, and soon will be irretrievably lost. How many high schools are there at the present time, however, which do not shape their curricula and their methods of education largely or wholly at the behest of the college, who do not care more for the half-dozen graduates who may hope to enter Harvard or Yale or Podunk College than for all the other hundred pupils who neither expect nor desire, nor whose parents desire for them, to enter college; who simply want to be artisans, or merchants, or farmers, and withal whom we desire shall be better citizens. Some years ago, when Greek was generally required for admission to college, even the village high school taught Greek. A famous high school near where I reside in Chicago, with fourteen hundred pupils, has one class of five and another of four in Greek, and the principal has announced that Greek shall no longer be taught in that high school unless there is more demand for it. Chicago will doubtless soon abolish the study from its high schools, even as it has abolished the study of Latin from its elementary schools. Had Chicago had the courage to do what it is trying now to do, fifteen years ago, it would not be bewailing the inefficiency of its educational system. The high school, if even but a small part of what is said of it be true, is failing in its function, even as the college is failing. It has followed the example of the college and has introduced all sorts of fads; it apes the college in electives and secret fraternities and athletics; it has forgotten that fully 95 per cent. of its pupils never go to college; it has forgotten that it is not training more than one-tenth of those whom it should; it has lost discipline till it is accused of fostering vice and dissipation. These are hard accusations. Perhaps they are not all true. But this much is true: The people are satisfied neither with the college nor the high school, and they are demanding in no uncertain tones a regeneration of both. And I am confident that this regeneration must come from below, not from above. Discipline must be regained at all cost. The high school must cease to be almost exclusively a feeder for the college and its narrow pursuits, and become the people's college, the school not for one million youths, who want to be professional men or loafers, but for five, six, seven millions of our common citizens. It needs, above all else, more teachers of the olden kind—firm, strong kind, wholesome men—teachers, real teachers. I am one of those who believe—most sincerely believe—that the high school has lost much of its efficiency in the training of our boys and girls because of its constantly decreasing numbers of men teachers and their replacement by young women, whose first ambition is to be where they ought to be, married and at home. As a man to men, who is there that hears me who does not desire—earnestly desire—that his boy of from sixteen to twenty—those critical, those dangerous years in every boy's lifetime—shall be under the immediate sympathetic influence of upright, manly men? We know ourselves what the dangers of

those years are; we know how potent was the influence over us of good men. It is not a question of book knowledge for the boy and girl—that is quite secondary—but a question of true manhood and womanhood. It is the fixation of habits of honesty and duty which makes the successful man. All else without these is vain. Let us dignify the vocation of the high-school teacher till it shall be looked upon in its proper light—the noblest calling that a man can enter upon. Today the college looks down upon the teacher in the high school, for you know he is merely a teacher of boys and girls, not a research man; it is almost impossible for a high-school teacher, no matter how able an instructor he is, to get on a college faculty. Let us insist that his emoluments shall be commensurate with his dignity, and let us further insist that he shall no longer be the Bohemian he now is, but that he shall have a fixed habitation and a home.

The high school must say to the college with firmness and emphasis: We shall educate our pupils as we think best, without dictation from you, endeavoring to accomplish the greatest good for the greatest number. We shall broaden our courses so as to help as many as possible to prepare for their several vocations in life, whatever they may be. We shall, first of all, endeavor to give that discipline which shall make them better men and women, better citizens, obedient to duty and to law. We shall try once more to inspire that zeal in the classroom which has been transferred, as in the college, so largely to the football and baseball field. We shall, above all things else, teach our pupils to read, write, and especially to speak the English language, even if they learn nothing else. We shall, next to this, endeavor to impart a thorough training in knowledge and duties of citizenship. And we shall drop a good many fads in education. We shall, for instance, banish the microscope, except as an instrument the pupil may hope to aspire to; we shall not permit the pupil to spend three months in the study of a grasshopper or a crayfish, but shall try to teach him how to observe the differences between an elm tree and a gooseberry bush. We shall not require him to memorize the dates of all the fracas in which Caesar engaged, but we shall see that he knows when and for what the war of the Revolution was fought. We shall not require him to know who ruled over Greece when Demosthenes lived, but shall insist that he know who is the governor of his own state. (I recently asked an honor graduate of the Chicago high school of which I have spoken, how the United States senators were chosen. She told me that she always supposed they were appointed by the President of the United States!) In short, we shall do our best to make our boys and girls intelligent and industrious citizens, with habits of application, accuracy, and pertinacity, knowing how to observe and reason, with a wholesome respect for justice, truth, and morality. And then, when we are done with them, we shall be very glad if you shall find among them an increasing number who desire to go yet farther in their school training and become leaders among men. And, in order to make sure that all this shall be done without hindrance by you, I should forbid by law all

interference on your part in the dictation of courses. I believe that when these things have been done, and done well, the solution of the function of the college will be solved and solved for all time; and then, and not till then, will the college be fulfilling its function as a popular institution of education to a far greater extent than it is now doing. Whether or not this means the abolition of the college I will not venture to say. But one thing, at least, will be demanded of every matriculant of the college—motive. He will go longer be permitted to dilly-dally along thru four more years in an aimless pursuit of culture and pleasure. And I also feel sure that not till the high school has been regenerated and brought back again to its true function as a disciplinary institution, will the college cease to be what it now is, a heterogeneous mixture of disciplinary, cultural, and professional schools.

DISCUSSION

PRESIDENT GEORGE E. FELLOWS, of the University of Maine.—There are many points on which I disagree with Professor Williston, but shall limit myself to two. I do not regard correspondence schools as serious rivals of the college. Those who join such schools seldom go to colleges: most of them are captivated by the advertisements. Such courses as they do take are really no cheaper in a money way than regular college courses.

I must take issue, too, with the proposition that teachers were better years ago than now. The reverse is true. Training as a rule now is fuller, and consists of much longer apprenticeship than ever before.

PRESIDENT JOHN N. TILLMAN, University of Arkansas.—Professor Williston's paper is blue. He scarcely sees things as they are. Drinking is much less in evidence than in former college days, and other vices are likewise fewer. There is far more sobriety and much more respect for women. My opinion is that we should not have fewer but more women in teaching work. This is the women's age. They are doing more good than many Chicago professors. The college man, but especially the college woman, is often unjustly caricatured, and this may lead to much of the present criticism.

PROFESSOR WILLISTON, University of Chicago.—May I call attention to the fact that I specifically said, "I do not believe that the college of today is worse morally than it was formerly"?

PROFESSOR CARVER, Harvard University.—There is some truth in the charge of idleness, and perhaps some truth in other charges made, but there are still some good things in the modern college. On idleness, in particular, it should always be remembered that there is a great deal of discussion among students which is outside of the regular study. This is frequently of more value than the study itself. Two highly important theoretical questions confront us: Shall we attempt to save all and make the professor the whipper-in, or shall we let the laggards go? I would suggest that it is not too bad that so few go to college. Abilities differ. Give each one as good an education as he is capable of taking—no better.

PRESIDENT JAMES H. BAKER, University of Colorado.—The American college is doing all it can under existing conditions. Many of us contend now, however, that sixteen years for culture and knowledge is too long a time. People will no longer stand for it. From the early New England college, students graduated at eighteen; now from the professional schools often not until as late as twenty-six. The best expedient seems to be to differentiate the college work, especially in the last two years, permitting the student to begin upon his professional work.

The elective system was a failure, as a final solution, but it was needed to bring about the abolition of the old fixed curriculum. We have several curricula now. Another thing to do is to eliminate a lot of useless stuff and mere repetition and end general education with the sophomore year. We will then get more than we are getting now. This sort of reorganization has been going on in the University of Colorado. In the first two years there is some choice, but much prescribed work. In the last two years, the student must work out a group of studies which will prepare him for something. We believe the A.B. degree will mean more and that time will be saved with these changes.

PRESIDENT JOHN R. KIRK, State Normal School, Kirksville, Mo.—This discussion is especially gratifying to a normal-school man. I believe a large part of the criticism made by Professor Williston should be accepted by college men, and that they should not seek to palliate the conditions. Some of the colleges in Missouri which I know best are not touched by such criticisms, but others are. There is many a boy of belated adolescence who goes to a high institution and is practically ruined thereby. For this class the larger institutions present the gravest problems. The boy gets lost in the complicated machine. Some of the old colleges are good in this respect; they are not so large but that they can keep account of their students.

PROFESSOR A. H. GUINN, University of Pennsylvania.—I wish to maintain that the standards of scholarship have not deteriorated. A much larger number of students are dismissed now for deficient work than in earlier times. I do not believe that state examinations, as suggested, would help at all. They always tend to focus a student's attention upon mere symbols. A certain student summed up a college teacher's duties as follows: "He is expected to do research work, to teach inspiring, and to represent his institution. Often one or the other of these functions gets slighted." We are doing as well as we can at present, often taking on much work of our own accord. I should say that all of these functions are performed as well, or better, than they were thirty or forty years ago. It is inspiring to me that such a topic as this has been put upon our program.

PRESIDENT JOSEPH SWAIN, Swarthmore College, Swarthmore, Pa.—I believe we should thank the speakers for having stirred us up. To the general question under discussion I must say both yes and no. I should say in general that the college is worth much more than it has cost. The college men and women of the country, as shown by Johnson's *Biographical Dictionary*, occupy by far the greater number of positions of confidence and trust. For such a position the college man seems to have about two hundred and fifty times as good a chance as a non-college man. Whether the American college is the best it can be, whether it needs some change, are open questions. Much that is true of the old college is not true of the new. President Baker has suggested some of the imperative modifications. We must see, I believe, that the college exists for study and not for diversion, and we must remember that the college has need of those who go to college rather than of those who are sent. It is said that in German universities one-third of the students die of overwork, one-third die from dissipation, while the other third become the leaders of Germany. We cannot expect in America to save all.

PROFESSOR CHASE, Beloit College, Beloit, Wis.—There are two ideals between which there can be no harmony: the one an ideal of culture for a class; the other a college education for all. The first is an aristocratic, and the second a democratic, ideal. We owe some duty to every student, and thus should have two ideals: save those who are worth it, and improve all. There are always the able and the less able students. I believe some such arrangement as is provided by honor courses would meet the situation. We could then carry all but give to some a chance for distinction.

PROFESSOR CARVER, of Harvard.—I wish to contend that it is not aristocratic to drop those who have no ability. It is entirely in line with the democratic spirit which only insists upon equal opportunity at the start.

PROFESSOR HARROW, Denver University.—We ought to remember that the older colleges trained formally but not liberally. They disciplined powers but they did not give general culture. We want the whole man trained.

SUPERINTENDENT C. P. CARY, of Wisconsin.—I believe we must grant that much of what Professor Williston said is true. There is much failure on the part of those who enter college which might be avoided, and many do not go to college who should. The tests are not always reliable, for many a distinguished man was not a strong student while in college. The university professor is too apt to care most for good absorbers.

PROFESSOR CARVER, of Harvard.—I wish to say that the last general theory expressed that men who later become distinguished are often poor students is not borne out by recent statistics.

HOW TO DEVELOP PROPERLY THE INNER COMMUNITY LIFE OF THE COLLEGE OR UNIVERSITY

I. CHARLES FORDYCE, DEAN OF TEACHERS COLLEGE, UNIVERSITY OF NEBRASKA, LINCOLN, NEBR.

The character of the inner community life of the college or university depends, first, upon how the student body spends its periods of relaxation and leisure; and second, upon how it occupies its hours of work. The motto recently found over a student's door, "Do not let your studies interfere with your college course" is full of meaning. The unconscious influence of the social atmosphere, past and present, may outweigh the curriculum in determining the tastes, habits, and general issues of student life. No one can live upon the campus of Columbia, Harvard, or Yale without feeling the force that tradition has inscribed upon halls and street. These enchantments of the past force themselves in upon all. The rich traditions of Cambridge and Oxford permeate everything about those classic halls. In these institutions many of our poets, artists, and historians have received that training that gave their genius direction and productive force, memories of which bind together alumni, students, and friends.

All great universities educate as much by their associations as by their teaching staff. The immense force of these silent influences is better understood when we consider that youth at its most impressionable epoch falls under their molding power. The adolescent at the threshold of college life is more plastic, more open to outside influences, than at any other period. The soul now reaches its greatest heights, or may descend to its lowest depths. The acquaintances formed, the society joined, are for the first few months more potent than the courses pursued in the textbooks and laboratory. At no other time do the causes of good and evil battle more fiercely for the possession of the young life, and nowhere are the results of the conflict more completely covered up by environment, good manners, and intelligence. The freshman is seized by these subtle forces, and the stream of college sentiment causes him to drift hither and thither as the current may bear him. A few resist the tide, if untoward, but the majority float. Said a teacher recently,

who cares beyond all else for the moral welfare of his students, "What is the matter with your college? I keep my boys for years and then turn them to you in September and by Christmas half of them have degenerated. They have lost punctuality, they have lost application, they have no responsibility, and some of them are gone to the bad." "What is the matter with your fitting school," retorts the college man, "that in a half-dozen years you can't teach a boy to stand up three months?" Many of our college men believe in throwing the freshmen upon their own resources—"Allowing them to flounder until they go down or swim. This is the way advocated by men who have no boys of their own. It is delightfully simple if we can only shut eye, ear, heart, and conscience. If none but the fittest were to survive, the cruelty might be defended, but some who unhappily cannot drown become cramped swimmers for all their days" (Briggs).

Probably one of the most serious features of the new experience of the matriculant is found in the unlimited freedom into which he enters. He is now released from paternal influence, with its loving restraint, an immature man with all the cravings and ambitions of a man, but without man's strength and powers of inhibition. He has come from a simple environment which has few temptations, and he is suddenly plunged into one of complexity, where good and ill vie with each other. The siren voices of evil fall upon his unsuspecting ear; vice dressed in its most fascinating garb flaunts itself before his admiring eyes, and ere he knows it, he yields to the seductive charm of his new surroundings. The crucial test of a young man's life is this struggle thru which he goes in the first few months in which he is away from home for the first time. Unfortunately, this, the severest battle of youth, is usually fought alone.

License that may probably belong to the university has been introduced unmodified into the college, whose legitimate function in the making of men is radically different from that of making specialists in the university. We have transplanted into our colleges the elements of the German universities in which the greatest freedom in both study and social life is granted. The student comes and goes at will; lectures and chapel attendance are a mere matter of form; no inquiry is made into his mode of conduct unless it be exceedingly disorderly. These university corporations are vested with special privileges which exempt their students in many instances from even civil authorities. If the student violates law, he is arrested, but he has only to plead his university privileges in order to be transferred to the university court, where his punishment is usually light. Many of the customs and liberties of these foreign institutions have been incorporated into our colleges where the conditions are fundamentally different. Foremost among the differences is found the maturity of the student body. Students are not admitted into the German universities until their character is formed. It is in the German gymnasium that the boys are made into men. The last two years of the gymnasium course correspond to the first two years of our college

curriculum and these are the two most critical years—freshman and sophomore. In the gymnasium the closest possible contact exists between teacher and student. Not only is the course of study prescribed, but every student must adhere to it and to the government of the school with the strictest military precision.

A similar practice obtains in the English university, from which we have copied much in the administration of our college affairs. The English university, with its short school year and long vacations, gives great freedom to the student, but we must remember that the English, like the Germans, make their men in the advanced preparatory schools before they send them to the university. Eton, Rugby, Harrow, and similar schools form the character of the English student, after which the university takes him and makes of him the leader. We shall take a large step in advance when we in America discriminate as sharply between the immature undergraduate and the university man; between the legitimate function of the college and that of the university.

Among other deleterious practices that have crept in with the unlimited freedom transplanted from the European university is the temptation to dissipate. Self-indulgence is on the increase in American institutions. Many of our students come from opulent homes where they have spent money freely. This habit is accentuated at college, where money is used lavishly not only in social pastimes, but on the issues of the college game, where money, often not his own, is staked by the student. The financial demands in the social life of our colleges and universities have already reached an alarming condition. In one of our leading colleges last year the average expenses of each freshman for floor tickets, box tickets, carriages, and flowers was \$250. How to correct the evils that have thus crept into our school system is not easily answered; but as undesirable habits growing up in the life of the individual are best corrected by substitution rather than by inhibition or repression, so it is believed that we may most successfully counteract these undesirable customs that have entered into our educational life. The best means of preventing these secondary activities from becoming the primary ones is to substitute for these diversions real intellectual work, and place it under the guidance of a strong faculty. We shall strike at the root of much of the trouble by making a clearer differentiation between college administration and that of the university. This should touch both the matter of assigned tasks and that of government, ever keeping in mind that the object of the college is to make men and women, and that it is the function of the university to take these men and women after they are formed and give them such technical training as will make them specialists for their chosen occupation. We must recognize the immaturity of the college student; that the freshmen differs from the high-school graduate only by the experiences of a short summer vacation; that his judgment is undeveloped, subject to whims and fancies, in need of being protected and guarded against its own hasty and ill-propor-

tioned conclusions; and that a curriculum three-fourths of which is prescribed, giving continued training in the fundamentals of a liberal education, is preferable to the prevailing elective system that permits the student to wander at will over the flowery meadows of the curriculum, nibbling a little here and a little there, and finally coming out with such a small amount worthy of digestion as to cause the assimilative processes of the mind to atrophy. Does not this very free elective system defeat the object of undergraduate education—namely, that of developing in the youth the capacity of sustained effort? The essential difference between work and indolence consists in the fact that work requires a capacity for continued effort, while indolence gives a tendency to shift from one thing to another to meet the cravings for change. That this elective system does in many cases encourage not only indolence, but in time laziness, is evident from the study of many of its results.

Another means of correcting the above-mentioned evils is that of confining university methods of teaching to the university, and college methods to the college. A considerable percentage of our college professors are lured from their legitimate channels of work by the temptations to inculcate research-methods among undergraduates who have no foundation for it. This is today one of the most serious faults in American education. Our youthful professor, late from the fields of investigation, is not content to teach immature men and women. His main concern is in his subject, not in his students. A prominent college professor recently said of a colleague, "He will never amount to much, for he already shows a vulgar interest in teaching." Such men want no one in their classes who does not show a special aptitude for their chosen subject. Many of these Ph.D.'s want only the cream of the undergraduates to whom they lecture, leaving the great majority to pick up what they can until examination eliminates them from the class. "My business is to teach men; if the students are not men, I don't want them," lately said a research professor. The supreme function of such a man is to advance the knowledge of his subject. He is false to his trust if he spends time in developing the mediocre in his class. It is not intended to underrate the importance of having among our college professors specialists in their favorite subject, men who give some time and that regularly to pushing out into the unexplored regions of their chosen field and occasionally to making contributions to the literature of their subject, but to inflict this specialty upon the class in the college is to do violence to the undergraduate.

Germany commands the markets of the world today because it discovers and trains the talents of each of its children. Any nation is strong in the degree in which it develops the character and general capacity of all of its citizens. The function of the secondary school and the college is to educate the masses, not the gifted few. The ambition for mere knowledge in a chosen field and the ability to train a few geniuses to discover it is essential to the progress of any nation; but the desire to discover in every child his leading faculties and abilities, and so to lead him and to teach him thru his develop-

mental periods as to enlarge these capacities into the full strength and beauty of manhood and womanhood is one of the greatest passions of the human soul. The investigator who discovers new truth is of little worth to the world if he cannot teach this truth to others. The very title "doctor," which marks the highest academic distinction that the university confers, implies that the recipient of the degree is qualified to teach the art which he knows. The legitimate function of the college is the application of this art in the training of the masses. It is undoubtedly a delight to polish the genius, but as great a delight to discover and develop him thru the work of the classroom. The sturdiest elements of our citizens are made up of the boys and girls, at first unattractive, probably dull; but among these are many that are really diamonds, colored at first with the dross of stupidity, but under the crucial test of the skillful teacher the precious elements are revealed and led forth from beneath their temporary covering. It was Arnold the teacher, not Arnold the investigator, who immortalized Rugby. It was Mary Lyon the teacher who made Mt. Holyoke an inspiration to every American woman.

The most pressing demand of our higher institutions of learning today is for teachers of this type; professional leaders who know how to adapt conditions both educational and social to the respective needs of the college and the university; men and women eager, not only to advance the subject-matter of their chosen field of study, but to call forth the noblest and best in each of their students. With such at the head of the administration of affairs, the student body, who have the welfare of their institution quite as much at heart as do the faculty, will co-operate in developing properly the inner community life.

HOW TO DEVELOP PROPERLY THE INNER COMMUNITY LIFE OF THE COLLEGE OR UNIVERSITY

II. JOHN H. T. MAIN, PRESIDENT OF GRINNELL COLLEGE, GRINNELL, IOWA

It is impossible for the college to do everything; it should not try to do everything. One of the chief causes of the ineffectiveness of present-day college education, which has been charged and proved, is the attempt on the part of the college to occupy the whole field of education, and to keep pace with the enlargement of its boundaries, its divisions and subdivisions, in all directions whatever, without providing for any centralizing interest or controlling organization. The past twenty-five years have been an era of expansion in the college, as elsewhere. In the greed for territory the college has neglected the art of cultivation. It has essayed the world and neglected the intensive cultivation of its own proper garden spot. Failure in this respect is not serious; it is not irremediable. It is merely an incident of growth; is a proof of the richness of life. Out of it will come, in time, a better education, greater efficiency, and a more adequate adjustment to the demands

of everyday living. While it has failed in some things, it has achieved in many things.

Efficiency, especially when used in relation to college education, is a much-abused word. To prove the efficiency of college education it is not necessary to show that every man who takes a Bachelor's degree is ready to plunge into the busy life of the world and succeed in it offhand. He may not know how to build a bridge, or select seed corn, or keep a set of books; but surely there are other standards of efficiency than these. Every college graduate ought to have considered, even tho vaguely, what his course in life is likely to be. In some cases he ought to be pretty well advanced in the theory of his life-plan, and in some degree, in its technique; but if this were proved to be true of the majority of students, the college would not be wholly vindicated. The popular judgment might be won over, but this would not prove the point, because effectiveness of this sort, while important and very desirable, is only one kind of effectiveness, and the man who fails to achieve it is not necessarily lost educationally. The question of the efficiency of college education is a very fundamental one and involves principles, and men, and adjustments innumerable. It is rash to say, in sweeping terms, it is or it is not efficient. The trend is toward efficiency, toward greater efficiency. There will be many haltings on the way, many things to condemn, many things to change, but this is true of every vital human movement. Perfection is not desirable, because that would imply a static instead of a dynamic condition. Growth toward perfection, toward greater efficiency, is primary in every educational method. The method gets its inspiration and its value not from the subject, but from the human relations involved in the subject. The fundamental thing is new birth for the man. "Ye must be born again," and again, and again, is axiomatic in all natural college pedagogy. If we save the man, if we bring him into a larger world and help him to understand it, the other things will come. If our work achieves, thru him and for him, educational salvation, he becomes larger than the facts, the principles, and the technique of any possible life-work. In so far as the college fails to do this, it fails to justify its title as the "fostering mother" of men and women. In discussing this subject, it is always to be kept in mind that the college exists for men and not men for the college. Efficiency includes subjects, and men, and paraphernalia, and action in the world; but it reaches beyond all of these and is to be finally affirmed or denied by the attitude of the spirit in the man toward the various problems of life.

In this fundamental thing the college is open to the charge of failure, but the world is not without sin, and cannot in justice cast a stone. It has been all intent on gathering in; the ethical and human elements involved have not received much attention. Just recently the public conscience has been aroused. The muck-raker has been showing that business, legislation, politics, the courts, have all neglected human interests for material ends, men for things. He has also been giving some attention to the college. It is

well that he has done so. His criticism will do good even tho it is not always characterized by vision and sound judgment. The muck-raker does not see that the college has been in the current of things, that it has been a part of the movement of expansion and development which has characterized the last generation. If it has been material, it has been in a material age; if it has been tinged with commercialism, it has been living and growing in a commercial atmosphere. It should have the greater condemnation for it has sinned against knowledge and against the ideals symbolized on its banner, and writ large in its history and traditions: "Nothing that is human is foreign to me." This is what it has said, but it has not acted so. But the final judgment has not yet come, and the college is not yet to be cast into outer darkness. Meanwhile it should have such a degree of justification, in spite of its sins, as the compelling quality of the atmosphere in which it has flourished warrants us in giving it.

More specifically, what are the besetting sins of the college? A brief answer to this question must precede any helpful discussion of the inner community life of the college. Broadly speaking there are just two. The first has to do with the immense richness of the college opportunity. The college has grown from a half-dozen courses to be a treasure-house of the world's bounties. We accept young people and turn them loose in this treasure-house. They are bewildered. We might almost as well turn them loose in the British Museum and expect them to know what to do.

In the modern college there is lack of personal direction. This should be the chief concern of the college. We have neglected it because we have been intent on other things. The other things are courses, subjects, division of subjects, laboratories, equipment, election, analysis; in short, we have been overwhelmed by the richness and the rapid growth of our educational material. We have been intent on making room for everything; on providing teachers for everything; on giving everything an equal opportunity with everything else, so that we have almost lost sight of the man for whom the whole business is ultimately intended. The modern college fails to recommend and to correlate, either because it has adopted a pedagogy of non-direction or because it will not venture to develop departmental rivalries and jealousies. The result is divergent interest, lack of cultural and world vision, lack of appreciation for the elemental unities. It is getting to be difficult now to study a subject—it must rather be a part of a subject.

We do not wish to return to the old college. We could not do so even if we desired it; but the unifying spirit of the old college we do want in present-day education. Scholarship, as America understands it, is, in its over-emphasis of analysis and the technique of the subject, for the college, especially for the lower classman, all wrong. It is leading us to the Alexandrian method of classification and subtle refinement of investigation which count facts, instead of aiming at the enlargement of the whole man. If persisted in it can result in nothing less than the loss of the most wholesome and essential

educational ideals. The lack of direction and the richness of college opportunity, together with the minute division of subjects that they may have exhaustive treatment, destroys, in any event, the spirit of unity in the college, and will have its influence in impairing the spirit of democracy and social solidarity out in the world. I believe college administrators understand thoroly this point—namely, that we are well thru the period of expansion and enlargement and are ready for correlation, adaptation, and unification. The real problem of present-day education is before us to be solved. The elements of it are clear. It is not an impossible problem, but it will require much time and patience.

What we want for the college has long been the burning question. The question now is, what we want for our students. When we have given this second question as much attention as we have given the first we shall get results, and shall have gone far in solving the pressing problem of college education. Our neglect of this question is the second sin of the college.

The first obligation upon the college is to give the right spirit, the right attitude of mind to its students. Speaking generally, the college has not done it. It has not done it because it has not desired to do it. A college man is first of all a citizen, a citizen in a democracy. He should be a good citizen. The college should set its heart on this. Good citizenship in a democracy implies relationship on the basis of efficiency with many men and many interests. It implies good understanding, and fellowship and sympathy with men. It is the same whether he is to be a physician, or engineer, or a clerk in a store. Success in any work gets its largest fruitage from a good understanding of men and capacity to deal with them on the broad fundamental principles that underlie good government, good business, good manners, and good society. We are, first of all, trying to educate men. The community interests in college consequently need emphasizing. They are the humanizing interests, as distinct from the narrower and more technical interests which also have their place, their distinct place, in college life. They have to do with personality, relationships, enthusiasms—in short, that part of education which looks primarily to the spiritual need of men and women. Facts and accuracy in dealing with facts are essential—no question about that—but facts without the significance of facts are of little value in the building of men.

Is it a product of education? Surely, to some extent at least. But that kind cometh only by fasting and prayer, but it is worth all that it will cost. The fact is, we haven't sought it; haven't been conscious of its need; we haven't wanted it. The first requisite of achievement is desire for achievement. If we seek the community interests as we have sought diversity, variety, and enlargement, we shall get community interests. If we agree to want the great fundamental humanities of life and growth to have emphasis in college life, we shall get them. We have striven for numbers and have got numbers; for analysis and variety and expansion, and have got them. If we seek, we shall find. This is a fundamental educational maxim. We

all alike have sinned in this educational business, and have sought the sensational rather than the genuine. The question now is, How shall we do works meet for repentance; how shall we regain the fellowship of the spirit in college, and give the student a vision of realities that transcends things and gives them their significance?

In every college there is a group of unifying interests quite apart from what are usually regarded as the official obligations of the college. Their significance as contributing to the unity of college life and to the spirit of good citizenship has not been recognized. Too often such emphasis as they have received has been sentimental and purposeless. Certainly they have not been utilized in any large educational way. These interests may be classed conveniently, tho not always accurately, under three heads—religious, social, atheletic. They are now, so far as college administration is concerned, waste products. This is poor business and poorer pedagogy.

The religious appeal is universal. It deals with the elements in human nature that are most fundamental and that contribute most to fellowship. Religion is not sectarianism: it is good-will, and mutual helpfulness, and the spirit of service. It is what the heart craves. On the basis of its universal principles I have seen Mohammedan and Christian live in harmony together in Jerusalem in the midst of warring sects and creeds. The American college has almost eliminated religious teaching because it has failed to interpret religion as it is. It is the most unifying of all human appeals, and the most wholesome for men in or out of college. A simple chapel or assembly service, characterized by the right spirit and accompanied by good music, will draw the institutional life together as nothing else can do it. Such a service is possible for every college or university. It will not come of itself, but it will come when we want it.

A Sunday afternoon vesper service is another means of promoting the community spirit. Such a service may be made strong enough and vital enough to draw voluntarily a large proportion of the student body. In connection with it may be rendered some of the great music of the masters, and in its responsive parts the entire audience may be made to say, and perhaps to think, together some of the great thoughts of the ages. Are we as anxious for this as we are for a new physical or a new psychological laboratory? If we are, it will come.

One of the strongest unifying forces in the college should be the Christian Associations. If the college has ideals and traditions that have worth, the Christian Associations are the media for giving them institutional expression. A group of young men and women, even a small group, in a large college can vitalize the spirit of the college, can make it a ruling spirit. The difficulty is that the associations have gone their own way, on their own initiative, unconscious that they have an institutional obligation to discharge. This institutional obligation is to make universal the simple and fundamental standards of college life. The time has come for a definite correlation of

college and associations, without impairing in any way the independence of the associations, with this end in view.

There are other religious agencies that might be mentioned, but these will suffice. This is to be said in general: The college has signally failed to emphasize the nobility, the dignity, and the universal quality of the religious spirit. Aside from all questions of utility and expediency, it is time that the college should awake to the consciousness of its obligation.

The social life of the college I shall not discuss, but it is well worthy the attention of college officers. If it is a menace to college order rather than a help, it is largely because we have not recognized its wholesome features and have taken no pains to make it a help. The "college union" and the "college commons" demand most careful consideration. They are primary needs in college life.

Among college organizations, that for convenience may be classed as social, there should be at least one that has as its distinct object the cultivation of the inner-community spirit. It should be called the college council. It should consist of students and faculty members, and should have certain administrative functions. What these are should depend upon circumstances, and, except within narrow limits, no definite program of activities for such an organization could be arranged. Its activities would vary with times and with institutions and would be applied where there was need. Co-operation and mutual understanding would, however, in every case be its ultimate aim. Closely associated with such a body should be the good-government leagues now forming in many colleges. The aim of these societies is to cultivate the fundamentals of good citizenship with reference to making them effective, not only for the future, but at once in the college life. A college in a democratic society should not be a chaos of interests, but a self-perpetuating experiment in democracy. That, without question, should be a paramount interest, and administrative purposes should have that end constantly in view.

Athletics have their place in the college fellowship. We criticize athletics, and justly, because of the overemphasis that they are receiving, but we are recovering from the fault of overemphasis and may hope for better things in the future. But we are to remember that the athletic spirit is in the blood; it is elemental. The crowd, whether in or out of colleges, loves a contest. The contest has, consequently, an element in it of great significance for the college and for the state. An intellectual contest, just because of its intrinsic importance and because of its remoteness from the popular interest, cannot perform the same office in the college life as the athletic contest. It cannot for that very reason appeal to the whole body of students. This is not to the discredit of the intellectual element in college life, nor is it to the glorification of the athletic element. It simply means that we must take the human spirit psychologically and pedagogically as it is. We must deal with it not by trying to kill its native instincts, but by directing them into right channels. The most intellectual people, probably, the world has produced acted upon the

people as a whole thru their religious and their athletic instincts. They sought the Pan-Hellenic spirit by means of the games. At the Olympian games, and at the other great national contests, the national feeling was created. There the people thought in terms of the state. The whole town, the whole state, could claim the glory of the athletic contest because it sprang from what was elemental in human nature. It appealed to the spirit in the blood. The contest was symbolical of the universal, hence it was great and significant in the national life, great because of the enthusiasm and patriotic fervor which it created. Pindar in his noble odes celebrated not the man who won, but the city, the state, the race. The contest was merely the outward expression of a profound spiritual unity. The same is true of the great dramatic festivals and the great religious festivals. They all sprang from the same source; all symbolized unity. It is true Socrates pointed out the injustice of a system which gave the athlete universal praise and at the same time condemned himself to death; but the fault was not in what the athlete had, but in the lack of vision which failed to see in Socrates also a national benefactor. Socrates illustrates the intellectual element in college life. When a man begins to think he becomes individual, and the more intense and analytic his thinking, the more individual he becomes. Two men may unite on the field of contest and be one in spirit; the same two may be philosophically, or zoologically, or syntactically, deadly enemies.

Athletics have literally been pleading for an opportunity to contribute in a larger way to the institutional life. We college officers have not understood their language. We have not heard them. On the contrary we have gone our way and given athletics over to the management of men acting apart, and not in close touch with institutional interests. The tremendous spirit of fellowship and loyalty that grows out of them has, consequently, not always been representative of the best traditions and ideals of the college, and there has grown up, in too many cases, a spirit of irritation and antagonism toward the college. This is one of the gravest indictments that can be brought against college education.

Of course, a program formed with this end in view will not work out itself. William James, I believe it is, who says, "A good juicy beefsteak is better than the most elaborate bill of fare." How shall we convert a program into an attractive repast for boys and girls who ought to be hungry for just the kind of food the program proposes to give them?

First: Out of the unorganized mass of subjects offered to the student it is the duty of the college to work out a fundamental and unifying basis which will serve for any plan of education. It should have to do with social and moral obligations, with historical perspective, with subjects that are essential to an understanding of the literature and thought of the age. As far as possible this work should be provided for the first and second years in college.

Second: By providing for this special purpose teachers who thoroly understand the real need of the boy as a prospective citizen, who believe in

him first of all, and who in their teaching prove that they "see the world steadily and see it whole." Colleges almost universally will have to reconstruct their method of selecting teachers. They will have to formulate a new pedagogy. They will be obliged to seek to get as teachers for the lower classmen not only those who know the facts to their ultimate analysis, but who as well know the scope and significance of these facts in the social and thought world. When the colleges demand a teacher of this kind, the teacher will appear; and when they get such a teacher, they will reward him. Now we do not reward him.

When we believe in men, we shall bring men together. When we want a strong inner-community spirit in the college, we shall have it. Such a spirit will grow out of the teaching of strong personalities in administrative and teaching positions. The machinery, the buildings are great things, but the men are greater. Let me quote Robert Louis Stevenson: "The house is indeed a great thing and should be arranged and rearranged on sanitary principles, but our heart and our interest should be with the dweller, that ancient of days and day-old man."

The problem we are discussing has resolved itself into three elements, clear and easily stated: First, unity of purpose, to be created out of the present educational chaos; spiritual enlargement; emphasis of elemental principles; second, differentiation on the basis of such a unifying purpose in accordance with individual tastes and needs; third, an institutional emphasis on the supreme importance of the spiritual ends and meaning of life. The college has a work to do along this line that no other institution can do. It is the only institution broad enough in the scope of its work to teach effectively that the ideal, the spiritual, the religious motive in all work is fundamental to quality, and fundamental to democracy and good citizenship.

SECRETARY'S MINUTES

President—HENRY G. WILLIAMS, dean of State Normal College, Ohio University, Athens, Ohio.
Vice-President—DAVID B. JOHNSON, president of Winthrop Nor. and Indust. Coll., Rock Hill, S. C.
Secretary—E. A. CROSS, associate professor of English, Colorado State Normal School, Greeley, Colo.

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A. O. Thomas, president of State Normal School, Kearney, Nebr., read a paper on "Who Should Determine Standards and Courses for the Training of Teachers, and How Should Such Standards Be Determined?"

A spirited general discussion followed.

The report of the Committee on Nominations was as follows:

For *President*—Joseph H. Hill, president of State Normal School, Emporia, Kans.

For *Vice-President*—D. McGregor, regent, State Normal School, Platteville, Wis.

For *Secretary*—W. S. Dearmont, president, State Normal School, Cape Girardeau, Mo.

The report was adopted and the nominees were declared elected.

The Committee on Resolutions reported as follows:

That we reaffirm the resolutions of last year as adopted at Cleveland.

Resolved, That there be a committee of five appointed to take up the matter of vocational work in the public schools and the establishment of vocational schools in the school system, and that it be instructed to report at next meeting.

Resolved, That it is the sense and thought of the Normal School Section that the Committee on Elementary Agriculture be given the hearty support of the section in its efforts to secure appropriations for agricultural work in the public schools, and for the preparation of teachers for this work.

Resolved, That a committee of three be appointed to make a report at next meeting on the status of physical education in the public schools and the preparation of teachers therefor.

Whereas, The Simplified Spelling Board has appointed a committee of three, Messrs. Seerley, McKinney, and Felmley, to investigate the feasibility of a larger use of simplified spelling in the normal schools of this country, and furthermore desires the co-operation of this department in this investigation; therefore

Resolved, That we assent to this proposed co-operation in this investigation and recommend that a place be given in our next program for the report of this committee.

Resolved, That there be a committee of three appointed to report at next meeting on the expansion of normal school work in the preparation of teachers in some way or other for the teaching of defectives, as the deaf, the blind, the feeble-minded, the incorrigible, etc.

Resolved, That a committee of eight be appointed by the President, representing the different sections of the United States, to investigate conditions and to prepare a report for this department on standards and courses to represent a standard American normal school.

Respectfully submitted

Z. X. SNYDER, *Chairman*

DAVID FELMLEY

HOMER H. SEERLEY

On motion the resolutions were unanimously adopted.

The department then adjourned.

E. A. CROSS, *Acting Secretary*

PAPERS AND DISCUSSIONS

PRESIDENT'S ADDRESS

THE PLACE OF THE NORMAL SCHOOL IN A SYSTEM OF PUBLIC EDUCATION

HENRY G. WILLIAMS, DEAN OF STATE NORMAL COLLEGE, OHIO UNIVERSITY,
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The form in which the subject of this paper is stated seems necessarily to narrow this discussion to a consideration of the place and function of such normal schools as are a part of the system of public education. This would

include only state normal schools, state normal colleges, and teachers' colleges or departments of education as integral parts of state universities. However, if this discussion seems to take a course defining and limiting the state-supported institutions for the training of teachers, it may be said that all other institutions undertaking to train teachers might with wisdom adopt the standards the state decrees to be the best to meet the demands of the public along this line. It must not be forgotten that the matter of education is primarily of public concern, and it means much to the preservation and self-perpetuation of the state. Hence, state-supported institutions for the training of teachers are most likely to be the expression of the will of the people, and it would clearly follow that the standards and ideals in such institutions ought to express the highest conceptions of the people on the subject of the training of teachers. From these institutions all others undertaking to prepare teachers for service in the public schools should obtain the suggestions that would fix their standards and curricula.

From this preliminary statement it must not be inferred that a private normal school cannot render as efficient service as one supported by the state. It is the *duty* of the state to prepare teachers for the public service; it is not the duty but the *privilege* of the private or church institution to engage in this service. The state, however, should at least supervise the training of those who are to mold the civic ideals that shall shape the future of the state and guarantee its safe perpetuity.

Anyone who will go to the trouble to investigate will find that for more than twenty years the Normal School Department of the National Education Association has been wrestling with the problems of the place and function of the normal school—and other departments have frequently undertaken to settle the question for us. In 1895 a committee was appointed to report on standards for the normal schools. That committee reported in 1897, just twelve years ago, and its report makes very interesting reading still. But there has been a further evolution of the normal-school idea since then. At the Cleveland meeting of this department in 1908, a committee appointed two years earlier made its final report on this subject, and I quote here the seven resolutions adopted:

To the Normal-School Section of the National Education Association:

1. *Whereas*, The public schools are the schools of the people;
2. *Whereas*, The public schools being the schools of the people, all factors in their organization are very clearly identified with the life of the people;
3. *Whereas*, The preparation of teachers is an important factor in the success of the schools and in the development of civilization; and
4. *Whereas*, The normal schools have grown out of the thought, sentiments, and opinions of the people and are the direct expression of the will of the people—

Be It Resolved:

1. That the state normal schools make high-school graduation or its equivalent the basis for admission to the standard normal course.
2. That the normal schools prepare teachers for the entire public service—elementary and secondary.

3. That the course for elementary teachers be two years, and that for secondary teachers, four years.
4. That the normal schools establish well-organized departments of research work leading to the solution of problems affecting education and life.
5. That while the normal school is not the only agent for the training of teachers, it is the state's chief agent, and as such it should set up the standards of teaching, determine the ideals, and train the men and women whose call is to educational leadership.
6. That the colleges and universities should not dominate the courses of study of the high schools to the end of making them preparatory schools, thereby preventing these schools from being the best expression of the whole people.
7. That the normal schools shall provide courses of study in which opportunity for ever-widening preparation may be made to meet the corresponding expansion of the courses of the public schools.

It will be noticed that this Denver program is based wholly upon the propositions set forth in those seven resolutions. This is done to give further time to the consideration of a few of the most vital questions that concern the work of normal schools. The committee reporting in 1908 did not think the question closed nor did they conclude that a further consideration of the question would be a waste of time.

An analysis of these resolutions ought to convince anyone that the normal schoolmen will not yield to the colleges of liberal arts or to the universities the matter of training teachers for the public high schools.

But we are told that no one knows what a normal school is. In one state it is an industrial institution for the training of colored people in farming, blacksmithing, shoemaking, etc.; in another a normal school measures up only to the standard of a four-year high school; in another, the normal school is one in which academic subjects with a little superficial pedagogy constitute the curriculum; in another, the work of the normal school is wholly professional, leading somewhat to a pedagogical top-heaviness; in another the standard is wholly collegiate; in another the normal school seeks to train only the elementary teacher, while in another the normal school considers its function to include elementary teachers, high-school teachers, and special teachers or supervisors.

But, who knows what a college is, or even a university? There are colleges existing today, authorized by charter to confer degrees, that would not measure up to the standard of some high schools. There are "universities" whose graduates are not adequately prepared to enter a college with freshman work. The fact in the case is, the most clearly defined course of study and standards known to the American educational public is the four-year high school, following an equally well-defined elementary school of eight years. These standards are a part of the public-school system and we ought to be just as clear on the definitions of normal school and college.

Yet in the minds of schoolmen and the general public as well, the term "college" is generally understood to mean four years of advanced study beyond the American type of secondary school. The term university is less

generally understood and more carelessly used. Our chief concern is to find the present place of the normal school in a system of public education.

If the normal school is out of the main current, then what about the law school, the medical school, and other departments of special and professional education already recognized as integral parts of our public-education system?

At the conclusion of the high-school course the student finds divergent roads leading to opportunity in as many directions. The "current" simply divides, due to the necessary differentiation of specialized schools designed to fit the individual for efficiency in one or another of the various professions, industries, or occupations. Teaching is one of these lines of differentiation, and special training is just as essential for this profession as for that of law, medicine, or the ministry. The traditional courses in languages, mathematics, sciences, and the humanities will no more make a teacher out of a man than they will make a lawyer out of him. If a prospective lawyer should be trained in a law school, and the embryonic physician in a medical school, so should the teacher-in-the-making be trained in a school whose one business is to make teachers.

Resolution number two, adopted a year ago, asserts that the standard for such a school shall be graduation from a four-year high-school course for admission and two years of work of collegiate rank for graduation in case of elementary teachers, and four years of such work for graduation in case of secondary teachers. This resolution was adopted without one dissenting vote, altho some objection was taken in the discussion that preceded. If this is to be our standard, why is not the teachers' professional school a college? It is to do collegiate work only, altho it may have a preparatory department in connection with it. But so have some of our great universities and many of our colleges.

Perhaps the prevailing criticism of normal-school standards of scholarship arises from the fact that it was once true. But this discussion is without pith or point if we fail to recognize the evolution and advancement in the courses for the training of teachers. The normal school of 1909 is no more like the normal school of 1839 than is the college of today like the college of that day—in fact, there has been less organic change in the college in a hundred years than in the normal school in the past fifty years. If we fail to recognize the pioneer work done by the private normal schools in advance of the state normal schools, we are ungenerous, ungrateful, and untrue to our educational history. Much of the criticism of the work done in these normal schools has been made by men who were not familiar with that work or who were ignorant of the conditions that made the elementary normal school necessary.

The evolution of the normal school has gone on apace until now we can speak of the normal college, the teachers' college, the college for teachers, or the school of education. Is it not time that we should so fix terms and standards as to indicate this evolution? If a school for teachers sets graduation from a four-year high school as its standard for admission, why is it not a

college in every sense of that term? Why not call all such institutions teachers' colleges or colleges for teachers? Iowa has already taken legislative steps in this direction and the State Normal School at Cedar Falls is now the Iowa State Teachers' College. Why not? Missouri is about to rename her state normal schools and they will be known as the Kirksville State Teachers' College, the Cape Girardeau State Teachers' College, etc. Ohio's two state normal schools have been officially known since their organization in 1902 as the State Normal Colleges. Other states have also taken action in this direction, and the movement has just begun.

Good as the word is, would it not be better to drop the term "Normal" as a part of the name of a professional training school? The term has been so badly abused that it would be better to drop it in every case where the institution is able to measure up to the standard of a recognized college. This does not mean that a teachers' college may not have a preparatory department or do sub-freshman work. The teachers' colleges have just as much right to do this kind of work as any other college. Besides, it is quite necessary and will doubtless always be necessary, especially so long as teachers are required to teach for less than as many dollars a year as there are days in a year. We can scarcely expect teachers to attend high school and college from six to eight years beyond the highest grade they are to teach, and to return to the elementary schools as teachers for 84 cents a day, the average now paid all the elementary teachers in the United States, distributing their salaries over 365 days, the same as their board bills. Let us not forget that a two-year college course for an elementary teacher gives her six years of education and training beyond the eighth grade, the highest grade, measured by knowledge of academic subject-matter, that she can be required to teach; while the four-year college course for the high-school teacher takes her but four years beyond her senior class.

The ideal standard for the elementary teacher is graduation from a four-year high school followed by not less than two years of further education and training in a teachers' college, prepared to give the right amount and kind of academic, cultural, and professional training in proper proportion. Just what this proportion is will doubtless be discussed later in this program, but we should not forget that true pedagogical methods cannot stand long on a superficial knowledge of subject-matter. No amount of psychology, principles or science of education, and methods, can take the place of a well-built foundation in language, science, mathematics, history, and art. On the other hand, no amount of expert knowledge of these things will guarantee success on the part of him who undertakes to arouse the dormant intellect, "to ring the rising bell in the dormitory of the soul," to teach, to guide, to fashion a character. The genuine teaching power is an imperative requirement of the teacher, and a thoro knowledge of the mental processes, the interdependence of motives and ideals, the stimuli that arouse and call to response and reaction the deeper currents of the inner life of the pupil, are as essential to produce self-activity

on the part of the pupil and train him to social efficiency as is a knowledge of all the ages. Education is not something imposed from without, but it is a growth, a development generated from within thru the application of proper stimuli and the supplying of the conditions of growth. These conditions must be supplied by the teacher, who must necessarily be familiar with the whole teaching process. This familiarity she must gain in a school prepared to give this professional type of instruction and training. Here is the true function of the teachers' college.

But what should be the organization of such an institution? Shall it undertake to train teachers only for the elementary schools or shall it also train teachers for the high schools? This department has said emphatically that it shall train teachers for all branches of the public-school service—elementary, high, and special. On this proposition I stand.

Public-school men and college men have long since conceded to the normal school the function of the training of teachers for the elementary schools, but the normal-school men will not abandon the idea that a normal college or teachers' college is the best place to train teachers for the high schools.

At the last meeting of the National Association of State University Presidents at Washington, in November, 1908, this question was discussed and I wish to quote from an address made by Dr. Alston Ellis, president of Ohio University.

The most pressing need at the present time in the training of teachers for real professional work is better means for the right training of high-school teachers. Few of the normal schools have courses of instruction long enough, broad enough, and strong enough to meet this need. The desired result can be brought about in two ways—by extending the academic and professional work of the present normal schools or by the establishment of "colleges of education" in the universities. If the state is to inaugurate and order this work, thru its accredited agents, local conditions should determine which plan will prove the most effective as well as least expensive. Where public normal schools are meeting the demand for trained high-school and special teachers, it might be a questionable policy for the universities to duplicate their work. Should this be done, friction between these educational wards of the state will inevitably result.

It is of recent date that the state-supported universities have made the training of teachers a part of their work in the public interest. Something of a definite idea of the means employed and the end held in view, in such cases, can be gained by the statements set forth in announcing the "School of Education" connected with the state universities of Indiana, Illinois, Minnesota, and Wisconsin.

Allow me to quote from the catalogs of these institutions: "At present the scope of the professional training in education at Indiana University is to prepare, as fully as its resources may permit, teachers, supervisors, and administrators for all grades of schools *above the common elementary schools*. This includes the professional training of high-school teachers, supervisors of special subjects, principals, and superintendents, and, in part, the whole training of teachers for higher institutions" (Indiana University, Bloomington).

"It is the purpose of the School of Education to bring together all the resources of the university which contribute in a professional way to the preparation of three classes of workers in our public-school system: (1) The high-school teacher; (2) the supervisor of special subjects; (3) the school superintendent" (University of Illinois, Urbana).

"The College of Education offers both a practical and a theoretical training for prospective high-school teachers and principals, for principals of elementary schools, for supervisors of special studies, and for superintendents of school systems" (University of Minnesota, Minneapolis).

"The course for the training of teachers is intended to prepare students for teaching and supervising instruction, particularly in the public high schools of the state. This preparation rests upon the basis of a sound general education, and consists, in addition, of the following principal parts: (1) academic instruction in the subjects to be taught; (2) professional training by means of (a) departmental teachers' courses, and (b) courses in the departments of education and philosophy, accompanied by observational work in selected schools" (University of Wisconsin, Madison).

It is conceded by President Ellis that the state-supported normal schools or teachers' colleges are or should be better prepared to train high-school teachers than are even the state universities thru their departments of education. If this much can be universally conceded, there is no room for argument in favor of the training of high-school teachers in the average college of liberal arts.

The normal school, or *teachers' college*, let us now call it if it undertakes to train high-school teachers, must maintain four-year courses equal in scholastic standards to the recognized courses leading to the Bachelor's degree in our standard American colleges. But you may say, then why not have these high-school teachers go to the standard American college for their training? President Baker has said that it would be better to add pedagogy to the college than to add the college to pedagogy. That is a pretty play upon words, but it will not stand the test of closer scrutiny. To admit that an A.B. graduate is the best prepared high-school teacher is to claim either that there is no profession of teaching or that the college of liberal arts is a teachers' professional school. Either proposition would be difficult to defend. The A.B. graduate is no more a teacher than he is a lawyer, but he is a little nearer to the threshold. His classical course will prove very valuable to him in either profession, but the thing that evolves a teacher out of this bachelor of arts is not to be found in his college course.

If the college graduate is to teach in a high school he will need to be in thoro sympathy with the purpose and sphere of the high school. He gets no such instruction in his college course, and this idea is foreign to him. He needs to understand the adolescent and the many problems of adolescence, and he receives little or no suggestion along these lines in college. He will need to know the motives and ideals that operate in the minds of boys and girls from twelve to twenty years of age, and he has had no instruction along this line. He will need to know the organization and articulation of the high-school courses with those of the elementary on the one hand, and the college, or scientific school, or professional school on the other; but his college course gave him no opportunity to study this problem in its concrete form, and perhaps not at all. He will need to know the processes by which the mind is aroused and by which it acquires knowledge thru its own self-activity; but

his college course gave him only an abstract idea of mental growth, for he had no opportunity to take this problem to the laboratory and work it out, since the college has no laboratory in education. The training school is the very center of the normal-school idea—the pedagogical laboratory—and is as essential to the training of the teacher as the clinic and the hospital are to the education of the physician. A normal school, normal college, college for teachers, or school of education without a completely organized and well-equipped training school is only a school of the theory of education and this any college could be.

This high-school teacher will need to be thoroly conversant with the evolution of secondary education, the history of great movements toward making popular and more democratic secondary education in this country; the successes and failures, the plans, and the methods of great educators who have devoted their lives to the cause of education. He will only by chance get any such view in college, and if he does, it will be imparted in an atmosphere that is more or less hostile to the very purposes of secondary education. The college wants the high schools made preparatory schools, while the people who establish them and support them demand that the 96 per cent. who do not expect to go to college should have their share of consideration. The college atmosphere is not that of the professional school. A teacher needs to be trained in the right kind of atmosphere.

To bring all these elements into the training of the high-school teacher he should have the environment of a professional school, the spirit and purpose of instructors who feel they are training leaders in educational and professional thought, and the observation and practice and practice-teaching of a well-organized and properly articulated training school including in its curriculum all the standard, or *constant*, secondary subjects. This training school may be an observation school to the pupil in the early part of his course and a practice school during his senior year. The observation should be done in two groups—the first while the critic teacher is doing the teaching; later in the course the pupil teacher may observe the practice-teaching of other pupil teachers; and lastly he must teach under the skilled direction of critics and supervisors. It would add to his future efficiency in the high school if he were required to observe and practice in the grammar grades of the training school as well.

Such facilities can only be obtained in a teachers' college, for the training school must be an integral part of the institution, entirely under its control and administration, with teachers selected and directed by it, with close articulation between the departments of principles and methods on the theoretical side, and the practice or exemplification of these principles on the other. The theory and the practice must harmonize, and this cannot be accomplished unless the training school is as much a department of the teachers' college as the department of psychology, or languages, or sciences.

All these things cost money. If the teachers' college undertakes to train

teachers for the high school, not only the training school in secondary subjects but an additional teaching force will be required. The work of the normal schools has in the past been confined chiefly to the training of elementary teachers and boards of education have had to be content to employ college graduates with neither experience nor training to do the teaching in the high schools. As the efficiency of elementary teachers has greatly increased thru normal-trained teachers, school boards, superintendents, and patrons have learned to appreciate the value of such training and are demanding similar training of high-school teachers. They are beginning to realize that the poorest teaching in the public schools is done in the high schools, because often the young teacher there thinks a diploma is the only requisite.

The teachers who instruct in our teachers' colleges must be scholars, teachers, and enthusiasts. Nothing less will enable these schools to turn out from year to year a class of young teachers prepared to elevate standards, create ideals, and professionalize the business of teaching. Here is where the colleges and universities should show their hand in preparing a superior product. Even the college and university professors need often to have a liberal training in the science and art of teaching. It is here that we have the most professional inbreeding. The university is the most liberal consumer of its own product, for where shall a university professor go to obtain scholarship and training above his class?

The teachers' colleges have not yet engaged very extensively in the training of high-school teachers, because in the first place colleges are industrious in creating the impression that special training, which they are not prepared to give, is not essential—often, in fact, detrimental, they say; in the second place the annual demand for high-school teachers is about one-fifteenth as great as for elementary teachers; and in the third place the teachers' colleges and normal schools have not generally prepared themselves for this grade of instruction.

In conclusion, permit me to say that it has been my purpose to open the whole field of discussion on this, to us all, important question, and of course I have not undertaken to offer a final word on any phase of it. No man can do that, for the normal-school idea has steadily grown into the idea of a college for professional training, and the near future will see training schools connected with these teachers' colleges, all including in their courses of instruction for the children and for the training of their future teachers complete courses in manual training, domestic science, elementary agriculture, and all the new demands of the civilization in which the schools live. For his reason the whole problem will continue to evolve and evolve, and nobody will be foolhardy enough to think he has said the *final* word.

THE TRAINING SCHOOL AS A SCHOOL OF OBSERVATION AND PRACTICE

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A normal school is a professional school. Its purpose is the training of teachers. It believes that teaching is not only a calling, but should be in every sense an art. It also believes that the teacher is not only a workman but he should be an artist, not an artisan but an artist in the work he does. It assumes that the number of "born" teachers is insufficient to meet the demands of any class of schools; and that while it is a good thing to be a "born" teacher, it is a wise thing to be a trained teacher. Those who are "born" teachers will not suffer from training, and those who are not so "born" must have it in order to attain any degree of success in teaching.

The normal school also assumes that a candidate for teaching has a number of needs, which must be satisfied in his preparation. Among these must be included an abundance of knowledge—knowledge of the various subjects of the school course, of the nature of the child, and of the process of mediation, the process of bringing child and subject into unity.

All this knowledge may be acquired from any available source and will be valuable as knowledge; but that is its limit, it is simply knowledge and is theory so far as the school is concerned. It has not been tested, put to service for the children.

This candidate needs also an increase in power, power to feel and to do. I sometimes fear we are failing in that we forget the necessity of a cultivated emotional nature in the teacher and in the child, and the value of trained initiative in both. The teacher must feel and do, to reach such results in the child. He must have vigorous impulses and ready responses, that his motor life be strong and efficient. Whenever this is done there is a demand for skill. The outcome of any effort to use one's different possessions will be in some form of skill, and this skill is one of the teacher's greatest needs. No matter what the extent of his knowledge, no matter how intensely and readily he feels, nor how vigorous his volitional life, the teacher must have skill. But skill requires practice, and practice requires observation—the study and use of the actual process of teaching. Here, as in all other activities, we see the thing done and then do it. Squeers was not altogether wrong. The teacher must observe and imitate what he has seen. Thus imitation thru observation and practice is an invaluable aid in the training of the teacher.

This leads us to the second point of the discussion. The training school is a school of observation and practice. It has no other ground for being. It must present opportunity for both observation and practice. The training is not complete in the absence of either.

Who then shall observe? The answer will depend on conditions. In general there are two classes of observers: those who are classified and observe

under direction, and those who observe as individuals and usually have little or no responsibility for results. In the latter case the observer guides himself more or less aimlessly and simply looks at the skilled teacher and tries to formulate for himself the why and how of the plan and process. He may ask some questions; he almost always misinterprets something of what he sees. His after use of it is wholly experimental, without oversight or insight.

I suppose many training schools have some such observers. In our school we are frequently asked for this privilege, the student wishing to fill a vacant hour by observing other students or the critics. Rarely some good comes from this use of time; usually there is no careful analysis of the lessons and but little profit from the observations.

The observers of the first class are organized into groups for real study. They are controlled and directed by one who knows the process and the principles underlying it. To these critics, reports are made and with them discussions are held, all looking toward the mastery of plan-making and use of devices. In this way observation is made systematic and purposeful. It may be unwise to allow students to observe the teaching of the inexperienced, the apprentice who is almost entirely unskilled. Yet it may not be altogether a failure. Sometimes much benefit is possible from observing one who is to a large extent without skill, who is at the time feeling his way into the problem of teaching. His difficulties are easily noted and his ways of removing them more nearly within the reach of the observer.

In some schools heads of departments are observed as illustrators of their subjects. There should be more of this kind of observation in normal schools and colleges having professional courses. The heads who cannot illustrate the teaching process of their own subjects fail of half their efficiency. Were such tests more common, they might tend to eliminate a share of the dullness in college teaching of which our president has spoken.

What then shall be observed? That is, what shall be sought in the observation?

Students are to observe everything that enters into the making of a teacher and everything injected into the actual exercise, whether wise or otherwise. They should consider the plan as a whole, analyzing it to find that out of which it came. They must seek the teacher's purpose in all the means used and see how all these aid or hinder that purpose. They may and often should do more specific work, to emphasize special pedagogic features as they appear in the process. For instance, the attention may be given wholly to the means of control used; how much of the teaching is direct or indirect; whether the purpose is to effect knowledge or skill; whether one or all or any of the formal steps are employed, or what is the spirit of the teacher. In every case the intention is to fix a relation between theory and practice in teaching.

When shall this observation be done? At what time in the student's course of preparation?

No hard-and-fast rule can be stated. Conditions will generally determine. Whenever the observer is best prepared for profitable work, according to the judgment of those in charge, this study may take place. Circumstances will often determine what is best. It should usually come in connection with the experimental teaching. This brings us to the third phase of the discussion—the use of the training school as a school of practice.

We repeat, "There can be no real skill in teaching acquired unless there is opportunity for trial; skill must grow out of one's efforts to apply his knowledge and to use his powers." It is a very simple thing to sit and watch someone set forth by word and deed what he has in mind; but it is an entirely different thing to put the observation into deed as an expression of one's self. Some of us understand this, and are forced by our observation and experience to the conclusion that those who observe successfully must in some way not only analyze that which they have observed but must seek to put it into practice—to test knowledge by use, and learn to do by doing. All teachers must test themselves in this way; they always have their periods of experimentation. The "born" teacher tests himself without training and succeeds thru trial. The "unborn" teacher does, or should do, his experimenting under direction, with close and friendly criticism, stimulated by a spirit and advice that are worth while. Failing in this, he conducts his experiments in the communities where he is unwisely employed, and this is the common way. It is the old story of the bushel of eyes in order to acquire a skill that may cure. Nothing of that kind should be allowed. Candidates should be compelled to test their preparation not only of facts but their power to use those facts in school life. There must be a school of practice; it should be entered and used before any independent teaching is attempted.

Who shall practice? This question may be answered as in regard to observing. The one who observes is only a candidate for practice, but not necessarily at the same time. Custom differs. In some cases beginners do no teaching until they have done considerable systematic observing of skilled teachers, reviewing and critically examining the principles employed under guidance of the critic. Perhaps this is the ideal. In the school with which I am connected, we cannot always hold for that sort of observation previous to his beginning practice. Conditions sometimes seem to compel that individuals be allowed to undertake practice before they have done any observation at all. Then the training teacher is obliged to do considerable illustrative teaching for that individual.

When shall this practice be done? In what year of the course? In many schools practice comes late in the student's course, in the junior or senior year. It were well could it be so in all; but conditions compel otherwise in some.

All over southern Illinois, I think pretty generally thru Illinois, there are young people going into the ranks every year who have had no more scholastic work than the eighth grade, sometimes the high school, and who have had

no professional training. They have been able to pass the examinations and have gone into the schools without training of any kind. Perhaps they have read some books of pedagogy as prescribed by the state reading circle.

When these come to a summer session in the normal school, having a school engaged and contract signed, may it not be better that they be allowed, perhaps required, to do some practice under direction, in order that the work which they are engaged to do in their schools may be less inefficient than it otherwise would be? It is our plan to allow those thus engaged to go into the practice class in order that they may get something of plan-making, something of method and devices, something of purpose and inspiration to take into their work as teachers.

An additional question arises in this connection—What are some of the sources of failure in the inexperienced teachers? What are the most striking needs of the young people? What are the points of emphasis with the training teachers?

The commonest cause of failure is lack of knowledge. The beginner may have a large number of facts in his subjects but they are unorganized, and have no unity for teaching purposes. Sometimes they are systematically arranged so far as the subject is concerned, but have no professional relation, have not been thought of in regard to the child. The failure is not in quantity of knowledge but in its adaptation to schoolroom uses. They must be led to see their possessions as means well ordered for teaching purposes.

Again our candidates fail in the matter of planning, which correlates itself closely with the matter of knowledge. If the candidate understands his subject-matter in relation to the child or the class, he is more likely to plan his work in all its details. He will need some help as to forms so that he may save time.

They fail often in their lack of control—executive power. They have the common notion of discipline: it is something to be imposed upon the child instead of growing up in him with his other growths. They need to learn that control is a form of teaching; and good teaching is a form of control. The inexperienced need help to see how conditions may be made to remove antagonism between the child and the various activities of the school. They need to learn the difference between leading and driving, the fitting time of each, so that the child will be satisfied with the teacher's authority because of the teacher's kindly leadership.

These beginners often fail in resourcefulness. They do not have at command the things they know or possess. They are not inventive. When one thing fails they have no other available. They need help in putting into place what they know and in doing promptly what they believe ought to be done.

They fail too in the teacher attitude or spirit. Many young people think teaching is simply an easy way to earn money, an occupation for gain only. They fail to see themselves in close relation to child life and as formative

influences for child character. They do not consider that the teacher is essentially a missionary and cannot accept the mercenary as at all a controlling influence in his life-plans. Teaching cannot become a trade, nor will teachers ever be trade-unionists, however much they may federate their higher interests.

To aid in bringing the young teachers into this attitude, into possession of this spirit, is one aim of the training school and of the critic teacher; so that the young teacher will be an enthusiast full of aspiration for the best things for himself and of inspiration to the young lives intrusted to his care.

THE FUNCTIONS OF THE TRAINING SCHOOL: ITS RELATIONS TO THE DEPARTMENT OF PRINCIPLES AND METHODS

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This meeting of the Department of Normal Schools is interesting and historic because in 1895, at Denver, this department, following the suggestion of President Snyder, took action that led to the appointment of a now famous Committee on Normal Schools, who thru several years of faithful, painstaking, intelligent work and much investigation gave us, in 1899, the Normal School Bible. This is the tenth anniversary of the publishing of that remarkable report, whose clearness, saneness, and brevity have seldom been equaled. It stated so well the principles that are fundamental in the normal-school organism that it has been a sort of Magna Charta. We owe a large debt to President Snyder and his corps of distinguished associates for this document. Much that has been said ever since and will be said for some time to come on normal schools is a repetition or an expansion of that report.

The ten years since that report was made public have seen a steady improvement in the normal schools of this country. Some of these improvements I know, and many I believe, are traceable to the common sense and logic found therein. The progress that has been most marked, it seems to me, is the increasing appreciation in which the training departments are held. They are coming into a position of authority and power, because their place, function, and value have been proven.

There is no longer any question in the minds of those competent to judge that the place of the training school is pivotal; it is the hub from which should radiate all the activities of the other departments. The time is here when a normal school will no longer say that they have associated with them a training department.

The late and much lamented Dr. Noss said, "Man has a soul; better, man is a soul." The training school is not the whole normal school, but it is the soul of the normal school and distinguishes normal from other schools. The great normal schools have become great thru their training schools. The name "normal school" has become broadened so that it is now generally

taken for granted that each normal school includes a training department, not as an adjunct, but as a necessary, vital part without which the school is not a true normal school.

No set of specific conditions could be laid down for the organization of a training school because of the lack of uniform conditions, local and general. The general purpose of the training school will continue to be to give to those under its charge "such a preparation for life that they in turn may prepare others to enter fully, readily, and righteously into their inheritances." It should be a source of information, inspiration, and power to all who come within its influence, whether student, schoolman, or outsider. "This school must give or require of those committed to its care scholarship. The school must associate or arrange this knowledge that it may be reimpacted. The school must give to each student the opportunity to develop the art of imparting this knowledge, to the end that he may acquire skill therein. The school's greatest function is to develop that subtle essential—character, personality—that indescribable atmosphere without which all the other qualities are of no value."

The dualism that very generally exists in a normal school is shown by its being called a normal and training school. It is unfortunate that there exists such a line of demarkation as theoretical and training departments. The normal school of the future will be built about the child as a center, and everyone will be a close student of the child and be with the child as much as possible. "Lo, a little child shall lead them" is a truth that will be demonstrated more and more in educational affairs.

The true success of any enterprise depends upon its aim, organization, and personnel. The first two elements we either have in the school, or should have.

The normal-school report in naming the essential qualifications of a normal-school teacher wisely gave character the first place. Character is the adjustment of our activities, as expressed in conduct along well-defined lines, in which the opinions and cumulative judgments of the past are considered and acted upon—"a completely fashioned will." We have no word or definition that makes the idea clear; it is power—efficiency. The need of care in securing this sterling quality in normal-school teachers is greater than in any other school, because of the direct influence this institution has on the future character of the citizenship of the state and the necessity of producing in them that inner stability of which Herbart spoke, or that simplicity for which Plato pleaded.

Sound scholarship is needed in the normal-school teacher, and I am using the term to include all the teaching force of the school. It gives a confidence and a power to the teacher that commands, and gets, and holds respect. One of the charges brought against us is that we have not attended to this matter, and the criticism has been in a measure fair, but there has been a marked improvement in the scholastic standing of the faculties of normal schools

in recent years. There has been much less inbreeding and a large increase in the number among us who have been trained in higher institutions.

It is true that productive scholarship on the part of normal-school faculties has not been as frequent as desired, but there are a goodly number of cases of productive scholarship and many more who began there to be productive and have been taken to other fields. The work of the heads of departments of normal schools should be so arranged that they would find the time for investigation, because they have a large field at hand and it is largely unexplored. The normal schools should become the centers of certain lines of investigation and take their proper place as authorities in child-study and the adaptation of practice and theory; but the teaching force is overworked and has but little time or energy left for such employment. If such a plan were in operation, it would react favorably on the institutions by increasing the respect and confidence in which they would be held, as well as by enabling normal schools to hold those master minds who have the ability to do research work. It would give tone to the institution.

The heads of departments should be well trained and of sufficient maturity to have stability, and they should have had some kind of public-school experience—that is, they should appreciate somewhat the fact that the problems they meet are problems of the child and his proper adjustment, and can be acquired only by experience.

It is not necessary to produce proof that a teacher needs to have culture and show the evidence of it at every point—that “intellectual and spiritual fullness that is so easily recognized” either by its presence or absence, and so difficult of definition. We need to recall that from the teacher of the normal school radiates most of the culture that many students have ever had, and the culture thus acquired is passed, in turn, to countless numbers of their pupils who are seeking social and ethical light. That is a reason for less rigidity in the course of study for the child, and a reason for more interest on the part of the normal school in culture training.

Teachers must have certain qualities that, taken together, we call teaching ability, in order to meet the requirements of our ideal. All of these qualities are never absent, but the more that are present the higher is the teaching ability of the individual, provided some neutralizing conditions do not mar the effect.

It is very desirable that a teacher have the elements of and develop freedom, ease of manner, confidence, quick adaptation and adjustment, power to present ideas clearly and logically, and a high degree of questioning skill. If these qualities are lacking the case is hopeless, but if they are present even in small degree, they may be developed.

Sympathy with the life of the young, tact, confidence, adaptation, resourcefulness, sense of humor, buoyant temperament, child-like faith, we cannot acquire; but all of these virtues may be increased by adjustment.

The teacher of an institution should have such a spirit of professional

loyalty and enthusiasm and sympathy for the institution that he would inspire in every student in the institution admiration, loyalty, confidence, and imitation. One note of discord makes more trouble than all the harmony produced can offset. It should be the policy in the normal schools more than in any other schools to have the motto, "Get in line or get out."

The ethics of our profession, when mentioned, always causes amusement. We need a code formulated, adopted, and lived up to; particularly do we need to be safeguarded against causes of criticisms that often come upon us.

Having assumed a well-selected teaching force for the normal school, how may the school be organized to produce the highest results? There should be a school policy or principle of organization actuating all, from the principal of the school to the janitors, and there must be a constant endeavor to shape the work so that there may be secured what we call "team work." The individual department must forego special development because we are not making specialists.

It is most unfortunate that the heads of normal schools are called upon to give a large part of their time, energy, and thought to politics and schemes of finance in order to secure the needed income for the institutions that they represent. They have often to become men of business, instead of giving all their energies toward the consummation of the aim of the schools.

Again, the normal school should consist of a single department, constructed about the child as a center.

There must be harmony of theory and practice, a common interest and enthusiasm in order that the student-teacher may transmute his theoretic knowledge into skill.

The educational policy of the institution may be of long standing; it may be the product of the president; but whatever its origin, there must be constant direction and adjustment to the end that the faculty may work out satisfactorily this scheme. This can best be given by the head of the school, who should be in close touch with all its activities.

The heads of departments should work together for the common end, and the details of each department's work can be carried out in harmony only by frequent conferences. Many details of co-operation between departments can be worked out in conference, and if needed by demonstration. For instance, all teachers who have children in written work should know how to direct and criticize the work and must insist that the child continue the writing lesson into the language, history, or geography lesson. Let the teacher of writing-theory show by a lesson the work to the faculty. To carry over from one subject to another the idea must be the combined aim of all working with the child, the better to form the habit in each condition.

The department of educational theory and philosophy should lead in all this organization. This co-operation and common knowledge of what is being done by different departments will result in the elimination of duplicate work. The question naturally comes up as to whether we may not be over-

organized. That is possible but not probable. The natural jealousy for the prominence and success of your own work, and your own individuality, will prevent perfect uniformity. Individuality and freedom are valuable assets and must not be organized out of existence or surrendered, except so much of them as is needed to conform to the general policy of the institution. It is evident that the most effective results can be secured when the policy of the school is held closely before us; when each teacher is a teacher of the method of the institution, and methods of his subject are not exalted unduly.

We have assumed that the child and the training school are the centers of the normal school. It is evident, then, that the various instructors of students in theory and practice must have a large common ground known to all the teaching force so that there will be substantial agreement between them as to modes of procedure and fundamental ideas, and that no confusion of ideas on the part of the students may result.

I know of no way of keeping the teachers of subject-matter and theory in touch with the needs and capacities of children, and of keeping these teachers from soaring into the impossible or impracticable, but by requiring each teacher to teach his subject regularly to a grade of children—not once in a while a special lesson, or to show off some special feature; but to do this daily, and thus subject his theories to the only test worth while—that of practice—and allow these theories to stand if successful, or be changed if need be. All teachers of theory should demand this as their privilege and right, and if they do not, they should be given a vision on the subject that will lead them to the light.

This method keeps the problems of the student-teacher before them and makes them charitable; recalls and emphasizes the practical; reminds them of the child and his importance, and gives an opportunity for investigation, verification, adjustment, and experimentation. "Theory out of touch with practice becomes dogmatic and groundless speculation."

The above plan sometimes will result in an entire change in theory, especially if the theory is taught by young teachers with small or no experience with children. Not a few teachers of theory hesitate about doing this work. They doubt their ability to produce results, and are conscious of a lack of skill, or a lack of sympathy for children, and an inability to get to the child's viewpoint. The main contention, however, is that theory and practice must agree. We must be shown that it will work. There is another advantage; it helps to destroy the unfortunate distinction between subject and critic teachers, which sometimes leads one group or the other to feel that they are the central feature of the institution. The reason for this tendency is clear; many of the teachers of subject and theory have had different preparation and less experience than the critic teachers.

The classes so taught are the best places to have the teachers in training do their work in observation, in preparation for their work of teaching. This observation should be directed by the teacher in charge, according to a definite plan.

In addition to the teaching of children, each teacher should be given some work of supervision. It may be small in amount, but it will give a broader view, a deeper sympathy, and a keener understanding of the tribulations of a teacher in training. There must be no clashing of authority or crossing of purposes in such supervision. Each supervisor must have specific duties.

It is a good plan to have the supervisors and critics of grade work regularly meet the teachers in training in their various classes of theory to discuss the devices and plans of work, their variation to the needs of the child in the different grades, and the pedagogy of the subject in practice. Teachers who only supervise sometimes become mechanical and engrossed in device, so that they lose sight of the larger and more important things.

It has been customary to make the program of the training school fit into the program of the department of theory, but the time will come when this will be just changed about.

In order that the training school be most effective it should be conducted, as nearly as its peculiar incumbrances will permit, along the lines of a first-class graded school. The students in training must be permitted to put into actual practice those principles that they have acquired both as to theory and class mechanics, that these ideas may have concrete and correct expression. The students in training must be subjected to criticism that is helpful, constructive, suggestive, hopeful, to the end that they may go from us as self-critics. Encourage in them initiative and efficiency.

In the weekly conference of students, it works well to have questions in regard to pedagogical subjects submitted by the students. These are then classified, and the topics assigned for investigation and future discussion by the students at round-table, which should be conducted by various members of the teaching force. These meetings often show us defects in the theory and mechanics of our work, where theory has gone to seed, or the spirit of education become lost in the fog of form.

The study and investigation of other schools, not only of the particular department of your interest but especially how results are obtained by good teachers in graded schools, will often be an inspiration and a revelation to the normal-school teacher. The necessary expense of such visiting by various selected members of the faculty should be borne by the school. For these visitors to "hunt in pairs" is of some advantage. They should follow a plan—not too extensive, but more intensive—and make a formal report to the faculty, when the points observed may be taken up for discussion. Visiting without report is like observation without conference. The culmination and end of securing knowledge is the expression and practice of it.

Another point of contact that must soon be taken up and carried out by us is the study of defective children and the training of teachers for this field by selecting those showing special ability that will adapt them for such work.

There then must be about a normal school that is alive, and that lives up

to the light it has, an atmosphere of co-operation, sincerity, helpfulness and hopefulness, keen discernment, and unlimited sympathy shown by all connected therewith.

DISCUSSION

HENRY G. WILLIAMS, State Normal College, Ohio University (replying to a question by a member).—In Ohio our normal colleges, in connection with our other state institutions—colleges of liberal arts—grant a Bachelor's degree to graduates after a four-year course.

FRANCIS G. BLAIR, state superintendent of public instruction, Springfield, Ill.—About what proportion of the graduates receive the Bachelor's degree?

JOHN R. KIRK, president of State Normal School, Kirksville, Mo.—I think the practice of giving the degree of B.A. in Missouri is not more than two or three years old. The school that I represent has not given more than five or six individuals the degree of B.A. We are very careful about it for the reason that an intense prejudice exists against it in some quarters, some of our higher institutions opposing very bitterly any such action by the normal schools. We have been very careful to make our requirements probably a little more exacting than at the university, and certainly more exacting than at some of the so-called colleges. In Missouri we have long given a degree of Bachelor of Pedagogy in some of the normal schools, while others I think have never given that degree. In the school which I represent, the degree of Bachelor of Pedagogy has been given to people who have had about three years more instruction than is included in an accredited four-year high-school course. I think one of the other normal schools, the one at Cape Girardeau, has gone somewhat farther in providing for the B.A. course than the other normal schools. I think that is where we have been a little bit weak—not standing up for our rights as normal school people, and I wish to say that what President Williams says in his paper and the idea which underlies it, is an expression of the intention on the part of the normal schools to move ahead and become better than they have ever been. There are two things for the normal schools to do; both of them have been referred to in the president's paper. One is that the normal school should move forward vigorously to something better than it has ever done, and the other is that the normal school should stand up energetically and positively for its rights as a school for the preparation of teachers.

JOSEPH H. HILL, president of State Normal School, Emporia, Kans.—I wish to give an answer to Superintendent Blair's question with reference to Kansas. In Kansas there were graduated this year a class of 100, and 8 received the degree of Bachelor of Education. I do not have the complete data as to the normal class of next year, but I should say that there will be 15 to 20 who will receive the degree.

Commenting on President Williams' paper, I am in complete accord with every position that he took in regard to the training of teachers from the elementary school thru every grade in the public-school system. There is no cleavage between the eighth and ninth grades and no justice in the system which says that the upper part belongs to the university and the lower part belongs to the normal schools. This proposition with regard to the normal college has passed beyond the stage of experiment, and, so far as our work is concerned, I am going forward in recognition of the fact that this is the natural and proper evolution of that work. I have no concern in the fact that the universities are doing pedagogical work, and I hope that they will realize their possibilities and do real pedagogical work along the same lines in which the normal schools are directing their efforts. Then if we are all working along these lines effectively, there will be none too many of us.

PRESIDENT WILLIAMS, of Ohio.—I find by study of various reports that the demand for high-school teachers is one-sixteenth of the demand for elementary teachers, so that

if the state normal schools were to graduate with the A.B. degree one out of every sixteen from its classes, it would be keeping pace with the relative demand for teachers from secondary schools.

W. S. DEARMONT, president of State Normal School, Cape Girardeau, Mo.—I rise simply to add to what President Kirk has said a statement of the fact that the normal schools of Missouri were authorized when they were founded, about forty years ago, to confer degrees. At any rate they have been conferring these degrees for many years, and I suppose that the provision was in the original statutes. For many years the only degree conferred was the degree of Bachelor of Scientific Didactics—later the degree of Bachelor of Pedagogy has been conferred upon the graduates of the advanced normal course. The requirements of that course are now about two and a half years of college work. In 1902 the Board of Regents of the school at Cape Girardeau adopted a resolution to the effect that the school would offer four-year college courses above the high-school course and confer the A.B. degree.

JOHN W. COOK, president of State Normal School, DeKalb, Ill.—I desire to ask the president whether he finds any difficulty in normal schools from the fact that the methods employed in the academic instruction of these candidates for teaching is so severely a college method as to induce them to carry the methods into the secondary schools. I want to know whether the graduates who go into the high schools are disposed to carry there the methods of the college rather than the methods which are proper for the secondary schools.

I have observed that some of our teachers in high schools are disposed to conduct the recitations of the secondary schools upon the method of the university; that is, the teacher does a large part of the talking. I desire to know what the chairman in his experience has to say in that respect.

PRESIDENT WILLIAMS.—I should like to say that this is exactly the trouble. The graduate of the college, who has had impressed upon him the importance of the training in mathematics, language, etc., goes directly into the high school, as the most available candidate for the position, and the first thing he does is to teach as he was taught, introducing college and university methods into the high school with adolescents, and in that part he fails. If he had an insight into the problems of adolescence, if he had the philosophy and purpose of normal-school methods combined with his regular college course, he would make a much better teacher in the high school.

In our school we require for admission to the college course graduation from a four-year high school, exactly the same requirements as for admission to the college of liberal arts. The state normal college and the college of liberal arts are in every sense co-ordinate—each has its own support from the state, each has its own separate mill-tax fund, but the student in the state normal college will receive instruction in the languages in the university classes and so in mathematics and some other branches. Instead of lowering standards it has been with us a decided impetus to raise standards. In no instance has a graduate of our four-year course in the state normal college gone out and made a failure as a teacher; in no instance has the scholarship of such a graduate been in any sense below that of the best of the four-year courses in colleges of liberal arts.

STATE SUPERINTENDENT BLAIR.—My contention is that these normal schools have no business dabbling with these degrees until they fulfill the first purpose for which the state established them—that of preparing teachers for the elementary grades. I am afraid that when they begin to give A.B. degrees they will emphasize the preparation of teachers for the secondary-school work, and leave the little fellows to dangle their feet. Let the normal schools serve the purpose for which they were established.

PRESIDENT COOK, of Illinois.—Does not the problem of the teacher decrease as the self-directive capacity of the pupil increases? Consequently do we not have the great-

est problem in the lowest grades? If that be so, would it not show that we should turn our main strength upon that first?

H. B. BROWN, president of Valparaiso University.—I think that in our state of Indiana we have solved some of these questions. We have but one state normal school, which is the head of a system of accredited schools for preparing teachers for their work. No person can apply for an examination for a certificate to teach in the public schools of our state unless he has had a high-school education or its equivalent, and he must have had at least twelve weeks of professional work in the state normal school or some one of the accredited schools for class "A" certificate. Then if he teaches one year successfully he can come back and take twelve weeks more of professional work and apply for a second, or class "B" certificate. If he wants class "C" certificate he must not only have had the high-school education or its equivalent, but he must have been successful as a teacher for two years and he must have completed a professional course of study.

The teacher who secures the lowest grade of certificate in our state cannot receive less than about \$50 per month; for the next grade he cannot receive less than \$60 and for the next he cannot receive less than \$70. We are having now an average of seven months of school in all of the counties and in many of them nine months. We have a number of teachers in the country schools of Indiana who are receiving \$100 per month. Before long we are going to have the salary for the lowest grade increased from \$50 to \$60 per month and correspondingly increase the preparation of the teacher, the next grade \$70, and the next \$80. We have in our state about 18,000 teachers; up to the time of establishing the minimum limit we had to prepare about 4,500 teachers each year. After the new law was enforced there was a change of only 1,000 teachers. Increase the qualifications and increase the salaries and these people will have positions which they will not care to leave.

PRESIDENT KIRK, of Missouri.—I think President Brown has done us good. We have gone aside this morning from more important matters that need consideration, to debate about the small number of persons who get Bachelor's degrees from normal schools. I really wish personally that Superintendent Blair would quit twisting the lion's tail, for while it may be a satisfaction to him, it is not going to hurt the lion. The lion is going right on just the same, because he is on the right track. This time the lion is the normal school; yesterday it was the universities. Now as I understand it, normal schools are not worrying very much about getting to confer degrees. That is a mere incident to the growth of normal schools.

I have spent a few days in rural schools lately and I have spent a little while in some Kansas City schools, and I want to say that I have found some rural-school instruction just as good as I have found in the best schools in Kansas City, and I want to say also that the rural schools of Missouri will bear inspection as much as the high schools of our state will bear inspection. Formerly my sympathies were with the university and for about five years I pleaded in the state of Missouri for that false standard set up thru the Higher Education Department of the National Education Association that every fellow who taught anybody else ought to have four years' more scholarship than the one he teaches; but I have found that our best teachers have teaching instincts and habits, and do not always need that extra scholastic attainment.

Z. X. SNYDER, president of State Normal School, Greeley, Colo.—I have never been so thoroly convinced in my life before that when you want to convince a Missourian you have got to show him. In regard to this proposition I am in very strong accord with the paper of the president and also that of Dr. Robertson. The function of the normal school is the preparation of teachers for the elementary grades, the preparation of teachers for secondary schools, the preparation of teachers for music, art, drawing, manual training, physical education, playground work, teaching the blind and deaf. I believe the time is coming when the normal school will be so connected with the charitable institutions that

have children in them that there will be a preparation of teachers for positions in the schools for the deaf and blind, and for every other school for defective or special classes of pupils in state-supported institutions, with a special training for each particular thing.

THE DAVIS BILL IN ITS RELATION TO NORMAL SCHOOLS

(Report of the National Committee on Agricultural Education)

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The beginning.—In February, 1907, there was a special meeting of superintendents of public instruction of a number of states and of presidents of normal schools to decide what had best be done to encourage both state and national action in order to provide some more effective means to hasten the introduction of agricultural teaching into the rural schools of the United States. It was recognized by those who were interested personally and officially in this problem that in many respects the times were ripe for action, as the demand from all kinds of sources were loud and strong for this kind of betterment of public education. There had been certain definite measures pending before the United States Congress for some years looking toward the co-operation of the nation with the several states to hasten the day of such consummation. Large interest had also come from the creation of the Department of Agriculture as a co-ordinate branch of executive government as the distinguished secretaries had aroused much consideration in the possibilities of agricultural education for the masses, while the last Secretary of Agriculture, Hon. James Wilson, had been specially active in endeavoring to arouse interest among the people at large concerning the great value and importance of such practical education for the rural populations.

The training of teachers.—At the same time the prominent success and popularity of the state colleges of agriculture and mechanic arts and the state experiment stations, both of which were largely founded and supported in the beginning by national grants of land and money, gave encouragement to the hope that the national government could also be induced to take a hand in the training of teachers of agriculture for the public schools thru the state normal schools, and thru this initiative practically induce the states to add equivalent large amounts of money to the national contribution, just as had been done in the development and expansion of the work of the agricultural colleges. There being almost unanimity of agreement concerning the desirability and the feasibility of such a plan of promotion, it was decided to organize a national committee whose special business would be the arousing of public interest and the unifying of the friends of these measures in the several states so that from both national and state standpoints agitation might be conducted, and both Congress and state legislature be urged to accept the plan and adopt some practical scheme that would enable this very important work to be accomplished.

The normal schools can help.—It was further recognized that the state normal schools were of a character and were already so well organized and maintained that they could easily add to their functions this special kind of endeavor without much additional extraordinary expense, since professional instruction in education in general, and special instruction in public-school work in particular, was already very completely established and thoroly organized. In addition, these state teachers' schools were now in every state, in some states duplicated several times, and in addition they were well organized, popularly supported, enthusiastically managed and were also in entire sympathy with the schools and the teachers to be benefited.

The work of the committee and the Burkett bill.—To accomplish this service the national committee assumed that the first great work to do was to secure the means to organize laboratories, teachers' training classes, and adopt courses of study that would enable the training of special teachers to be a reality. The most reasonable and feasible plan as a practical and sensible measure that was then in sight was a proposed plan that was in Congress and was known as the Burkett bill. This bill, which had been introduced by the Senator from Nebraska, provided for but one thing—the education of teachers in agriculture and mechanic arts thru the state normal schools—and made a moderate appropriation, that would necessarily need to be supplemented from the treasuries of the several states, to give the resources necessary to accomplish in an effective way the proposed undertaking. To this measure the national committee gave its hearty co-operation for two Congresses. Progress in the spreading of information and the gaining of support for the cause in educational ways has been accomplished; but thus far, due to many different causes, this bill has not yet been reported from the Senate Committee on Agriculture and as a measure is still awaiting the sanction of those authorized to adopt laws suitable for the needs of the people. This condition is not due to lack of appreciation of the value of the plans proposed, but is due to a sort of inertia that is a part of legislation, since so many great problems are pressing for attention and decision at the same time. Educational matters are of a nature and kind that they receive very minor attention from Congress, and many of the more effective members hesitate to believe that the United States government can afford to add to its field of legislative labor these kinds of problems, however important to the people at large.

The Davis bill.—In addition, complications have arisen among the friends of agricultural education for the rural communities by the introduction into the House of Representatives of a measure for secondary education in agriculture, popularly known as the Davis bill. This measure originally provided no way whereby the educating and training of teachers in agriculture and mechanic arts could be successfully accomplished; but thru the influence and arguments of the national committee, the Davis measure was so remodeled by its author as to care properly for this special training. Hence the Burkett bill in the Senate and the Davis bill in the House have been the more promi-

ment measures that have been seeking adoption at the hands of the people's representatives in Congress. The Davis bill is the most far-reaching one, in its benefits to the masses, that has ever been before Congress. It is a proper measure and would not interfere with any educational work now being done, while it would greatly increase the educational advantages offered to the boys and girls of the United States. There is much difference of opinion among the friends of agricultural education and there is some doubt now as to the possibility of these differences being adjusted. Under the rules of the House, that have prevailed in recent years, the authority of the Speaker is practically capable of suppressing consideration of any measure not necessarily acceptable to this prominent congressional official. Hence, notwithstanding the Davis measure would pass with a large majority if a vote of the members of the House could be taken on the merits of the same, yet the Speaker has so organized the Committee on Agriculture that no report on the Davis bill has been made, and it now appears as if none will be made as long as the present arbitrary methods of management are permitted to be the authorized procedure in legislating for the future.

The progress made.—Despite these untoward conditions, much real progress has been made since the national committee has been organized. Some of the states have authorized teacher-training in agriculture in the normal schools. Others have taken it up without legislation, and there is good reason to think that within a decade all these schools will have some suitable work in this direction and that some plan will be adopted that will bring actual instruction in elementary agriculture to every pupil in the rural schools.

There is more agreement today existing as to the immediate need of this instruction being given; there is more faith among the educators themselves as to the possibility of such work being able to be successfully carried out; there is positive feeling that the plans of doing the work are practicable and possible; there is unanimous opinion in the national committee that the promoting of these plans should be continued until action is reached. Those best qualified to decide believe that a continuous keeping of these matters before the public consciousness will gradually compel public attention and will finally secure satisfactory decision by both the states and the nation.

The most important work next to be done is to convince all friends of industrial education that (1) there will never be much done that will be of great benefit to the industrial classes until the public schools are made an actual factor in the service of the state; and (2), that the nation must co-operate to that end, recognizing that of all the problems to be solved by the American people none of them is so far-reaching and will take more sincere, thoughtful consideration than this of the universal education of the coming generations in the industrial arts. However sanguine educators may be as to securing of an early decision on the fundamental principles involved, however certain they may be that there will be immediate acceptance by the popular will of those principles, whatever is agreed upon by them as a plan or policy best to

be adopted and put into the public work to be done, yet the desired results are not to be reached the next decade, the agreements necessary will not be formulated this generation, chiefly because the very supreme importance of the service to be rendered is complicated and hindered by the remarkable magnitude of the problems themselves. Universal elementary education is today the most difficult proposition that our civilization is compelled to determine, and then its difficulties are just begun. The forward movement always carries these necessities and perplexities; but the courage of the American is commensurate with the demands, and plenty of time will prove his capability to meet the needs of the people.

TEACHER-TRAINING IN GREAT BRITAIN

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While the idea of professional schools for the training of teachers did not originate in America, but was imported from Prussia, it seems to be true that the American system of normal schools has developed on lines of its own, quite independent of foreign influence. The American normal school is *sui generis*. We have gone to Germany, more or less, for our pedagogy, but nowhere at all for our organization of work. It so happens that we have developed, in the main, a common type of organization, but not by imitation of a common model. Meanwhile, our "kin beyond sea," almost unheeded by us, have been slowly developing a quite different system of teacher-training, the outgrowth of British character and traditions. The "teachers' visit" to Great Britain during the fall and winter months of 1908, which was set afoot by Mr. Alfred Mosely as a return visit to that made by British teachers to American schools in 1906, afforded a welcome and favorable opportunity to study this system at first hand; and it has seemed to me that I should be justified in claiming your attention for a brief account of the evolution and present status of teacher-training in the motherland.

The training of teachers in Great Britain began as a matter of philanthropy under the stimulus of the religious motive. The first experimental move in this direction seems to have been made by the British and Foreign School Society, in the Borough Road School, as early as 1817, but there was no appreciable activity manifested until 1840. In 1839, Parliament, after a futile attempt, which nearly wrecked the government, to establish a normal school free from denominational bias, made its first appropriation, £10,000, for the purpose of training teachers, which was equally divided between the two societies above named. By 1844, nine training colleges had been opened; but not until after the act of 1870 did the movement acquire much headway.

A comparison of these dates with the corresponding epochs in the development of American normal schools is not without interest. The first American normal school was opened at Lexington, Mass., in 1839, and there were

but seventeen normal schools in the United States up to the close of the Civil War, in 1865. Thus both in Great Britain and the United States the whole history of teacher-training has been confined to the last seventy years, and its active development to the last forty years.

The type of training college developed from these beginnings is that known as the residential college, established under religious auspices, either (a) Church of England ("National Society") schools, or (b) undenominational schools in which the nonconformist element is naturally strong. In all of these, the sexes were separated—men's colleges and women's colleges. They prepare teachers for only the elementary schools, and have a two-year course of study. This is still the predominant type in England.

The residential college is, in form, what we loosely style a "boarding-school." It is in fact a school family, in which the students, and the teaching staff mostly, live together within the same walls and in close social relations. The religious feature is prominent, especially in the schools originated and controlled by the Church of England. Some of these have been, in time past, almost of a monastic character. The effect of this close association with cultured masters or mistresses is of great social and moral value to the prospective teachers, while the assiduous attention given to sports and out-of-doors recreation has equal value to their physical well-being.

The number of students in such a college is limited, seldom exceeding 150. The student pays an entrance fee on admission of, usually, £25. After this, for the full two years, there is no charge for tuition or maintenance. The school receives a government grant for each teacher successfully graduated; but must, in many cases, depend on endowments or voluntary contributions to defray a part of its running expenses as well as the original cost of its plant. An interesting feature of the indoor life of the residential college and the students' hostel is found in the "common room," a large and comfortably furnished apartment devoted to the social and recreative life of the students, not a state reception room, but what its name implies. Altogether, indoors and out, the two years spent in a residential college must be halcyon days in the memory of the teacher thus trained.

It is necessary at this point to turn back and gain some idea of the preliminary training required for admission to a training college. For many years, British elementary education has been afflicted with a form of apprenticeship known as the pupil-teacher system. This, in 1846, superseded the older system of monitors, introduced by Bell and Lancaster. In its earliest form the term of apprenticeship was five years, beginning as early as the age of thirteen years. The pupil teacher received a small wage and must pursue studies under his headmaster, out of school hours, in order to pass an examination for admission to the training college. At the close of his term of apprenticeship, the pupil-teacher could either enter a training college or continue in service as an assistant teacher.

The term of apprenticeship was reduced, after a time, to four years and

eventually to two years, the age at beginning being raised to fifteen years. In this latest form, the pupil-teacher, serving only two years, must spend half his time as a pupil in schools known as pupil-teachers' centers. This system is still in use in the city of Manchester, but in most cities has been superseded, within the last two years, by a new plan by which the prospective teacher must come to the training college thru the secondary school. After not less than two years of attendance in a secondary school, he becomes a "bursar;" that is, during his third year he receives a government grant, or allowance, which covers his tuition fees with something over for maintenance. In his next year, corresponding to the fourth year of our high school, he becomes a "student teacher," this term being technically different in meaning from "pupil-teacher." He now teaches eight half-days in the week for pay, as an apprentice, but must spend the other two half-days as a pupil in school, keeping up his work in the common branches.

It should be understood that the British secondary school is not merely a school lying above the elementary school, but is a wholly different type of school, overlapping the elementary school in point of the age of pupils, but designed for a different stratum of society. The British elementary teacher comes almost invariably from the lower middle class and teaches children of the same class. Under the pupil-teacher system, he might pass from the position of pupil to that of teacher in the same school; and then after passing thru the training college with people of his own social stratum, would be returned to the elementary school again to teach pupils of the same class. The new system aims to bring about association for a time, in the secondary school, with youth of a higher class socially, with a view to mitigate, at least, the provincialism of the prospective teacher.

The Briton still adheres, however, tho with somewhat diminished rigor, to his ancient idea that practice should precede theory; and so all study of educational theory must follow this apprenticeship, to illuminate what he has learned to do by rule of thumb; as if one should light a lantern at the end of his journey instead of the beginning.

But while the residential college has pursued the even tenor of its way for sixty years and more, and the pupil-teacher system, after sixty years of sway, has suddenly been radically modified, a new type of normal school has arisen, the day training college, undenominational in character, and attached, as a rule, more or less loosely to some university. This type of college was first recommended by a Royal Commission in 1888, and authorized by law in 1890. Such a training college is now connected with every university in the kingdom. While these may administer the two-year course of the residential college, the majority of their students are working for university degrees and the teachers' diploma at the same time in a three-year course.

In Great Britain, only universities may grant degrees, and the degree course is three years, instead of four as with us. The "professional work" includes not only the theory and practice of teaching but also vocal music,

drawing, hygiene, nature study, and manual training. All this work amounting to at least one subject thruout the three years must be carried in addition to the regular degree work of university students by the pupils of the day training college; which necessarily means that part of the work must be slighted or great risk of break-down must be incurred, especially in the case of women.

In connection with some of these day colleges, are hostels for women; but in most cases the students either come from their own homes or live in "licensed lodgings" approved by the college authorities. They thus miss the social culture and companionship which are characteristic of the residential colleges. Moreover, the number of students is usually much larger in the day colleges, in a few cases reaching five hundred. There cannot be, therefore, such close personal relations between students and teachers as in the other type of school. They are at a further disadvantage from the attitude of the university toward the training college, which is rather one of toleration than of nurture. To the university, the degree work is the only thing to be considered. It shapes its time schedules to suit its own convenience, and the poor training-college student must snatch his dole of professional work as he, or his instructors, can find room for it. And he is at a still further disadvantage in the matter of practice-teaching, as will appear later on. It is maintained, on the other hand, that students in these day training colleges derive a social advantage from their contact with the university, inasmuch as they mingle freely, in the "common rooms," debating societies, etc., with students having other aims in life and preparing for the medical, engineering, ministerial, and other professions. Thus these colleges produce teachers of less technical efficiency but more broadly educated.

The Scotch organization for teacher-training is so radically different from that prevailing in England and Wales, and is so peculiar withal, that separate description becomes necessary. Scotland has very few residential colleges. Formerly, the work of teacher-training in Scotland was mainly divided between the Church of Scotland and the Free Kirk, both Presbyterian; tho there is a Roman Catholic Training College in Glasgow, and a Church of England one in Edinburgh. These rival churches had rival training colleges in the same cities—in Glasgow on the same street; but these Presbyterian colleges have now all been taken over by the state, and the two in Glasgow, the two in Edinburgh, and the two in Aberdeen have been consolidated under one administration, tho still conducted in the original buildings, in itself a serious handicap, I should think.

The present system of control is unique and probably only temporary. All Scotland is divided into four parts, or "provinces," each centering about one of the four universities, in connection with which the training colleges are located. In each of these provinces is a "provincial committee" charged with the conduct of teacher-training. Some of the members of each committee are university professors, but not the majority. It thus happens that while the

Scotch public schools have greater freedom and vitality than the English, the training colleges are subject to university domination to a greater extent, and also to an over-estimation of degrees as a qualification for teaching.

Only a few of the eighty or more training colleges in Great Britain have practicing schools under their own control or immediately adjacent to the college. And the day colleges are worse off than the residential, tho some of these also are at a great disadvantage. The practice-teachers must be sent out in squads to schools scattered about the city, and much time must be spent by students and their supervising teachers in traveling the streets. Seldom, if ever, does a practice-teacher have any continuous contact with or responsibility for a given class of children. They are dealing, for the greater part, with strangers, and transiently; so that their teaching must altogether lack organic connection and the personal touch.

To show under what a handicap some colleges labor, let me cite the case of Bangor, in North Wales, where there are three training colleges, a Church of England college for women, an undenominational "Normal College" for men, and the university day training college for both sexes. Early in September, the normal college, students and teaching staff, convene in Liverpool, eighty miles away, and camp there, so to speak, for three weeks, doing practice work in the city schools, after which they return to their own place and take up the studies of the year. In like manner, the day college hies itself to Wrexham and pursues a like course there, the city of Bangor not being large enough to furnish all the needed opportunity for practice.

In many of the colleges, considerable time is given to what are called "criticism lessons." A student teaches, in the presence of all his classmates, a class of children whom he has never seen before, brought in from some outside school. He knows nothing of their previous instruction or their fitness to receive the lesson which he has prepared himself to give. Naturally, he is likely to go far above their heads in his labored endeavor, and is also likely to have much trouble in commanding the attention of the children. *On some succeeding day*—such is the direction of the inspector—the performance of the practice teacher is brought up for discussion by his classmates and the teacher in charge. While this practice may have the authority of Jena in its favor, I am afraid that the atmosphere of Jena is also essential to its profitable administration.

At Manchester, I had the privilege of visiting the somewhat famous "Sarah Fielden Demonstration School" under the direction of Professor J. J. Findlay, who is very much a disciple of Professor John Dewey. The school reminded me forcibly of the similar venture made by Professor Dewey some years ago, in Chicago; but I hope that it may prove more permanent and successful than its prototype. I should greatly like to visit it again in a few years hence.

But you are doubtless wishing to ask me, "What practical message do you bring us from the other shore? What have American normal schools

to learn from British training colleges?" That must depend somewhat upon our willingness to learn. We must, I fear, become more clearly conscious of the weaknesses and defects of our own system, whatever they are, than we yet have shown evidence of being, before we can learn very much from any foreign source. If one goes abroad full of the idea of American superiority in all things, he may pursue his observations widely without any severe shock to his prepossessions. And I fear that such is the attitude in which some of our teachers went forth on this mission. For myself, I am not ready to generalize very widely or confidently. Two months is too short a time in which to estimate the educational system of a great nation, especially if that system happens to be in a state of rapid evolution and transition, which has been true of Great Britain for the past few years.

I will therefore venture only a few tentative opinions as to what the motherland might or might not teach us if we were disposed to learn.

1. There is no doubt that Britain could teach us much with respect to looking after the physical well-being and efficiency of prospective teachers. First of all, the candidate for admission to a training college must pass a medical examination. The anaemic and the deformed, the victims of spinal curvature and incipient tuberculosis, do not find, as with us, an open door to the teaching profession. It is not considered there that anyone physically disqualified for other callings has therefore a call to teach. In the second place, great prominence is given to out-door recreation and sports, as also to indoor "drill," or gymnastics. In the residential colleges, there is no recitation work in the afternoons, but students, men or women, are required to get into the open air and play or walk. Of course, the climate favors that more than with us; but the training college has no place for the girl who is physically unfit to take vigorous physical exercise, on the playing-ground and in the gymnasium. Our normal-school girls could learn hockey from their British cousins with great advantage to themselves, to say nothing of their pupils later on.

2. That British schools greatly excel ours in the results which they get in singing seems to me beyond dispute. I am not disposed to attribute this to their general use of the tonic-sol-fa method, tho I do not feel myself competent to pronounce any positive judgment on that matter. The superiority is doubtless due to the fact that the British are altogether a musical people, and take hold of singing with more interest and assurance than we do.

3. Not confining the remark to training colleges, it is to be conceded without hesitation that British schools are superior to ours in the matter of pictures and school decoration. They go ahead of us in this particular as far as they fall behind us in the development of school libraries and their systematic use.

4. As may be inferred from what I have already said, I do not think that we have anything to learn from Great Britain in the matter of practice-teaching. Our own system and methods seem to me in every way preferable; tho it is unquestionably true that our practice schools should be much larger

than they usually are, so that less of the teaching in them need be done by practice teachers, and more by the regular staff of the training department.

5. Concerning the actual teaching in the schools, it is to be said that while the subject-matter is not radically unlike that in ours, the handling of the work is noticeably different. The lecture method has much more toleration than with us, especially in the day colleges. I had considerable difficulty in finding teachers engaged in actual instruction—that is, in conducting recitations. Very often, the teacher was simply sitting at his desk while the pupils were writing up notebooks, this being, seemingly, the principal industry of the British student. These notes are almost invariably written in blank-books, with ink, and with much regard to accuracy. The British teacher evidently believes that the only way to get a clean grip on knowledge is by writing it out. How the students came by the knowledge which they were writing out was not always clear to me, for there seemed to be much less use of textbooks than with us, and I very seldom heard any assignment of work for evening study. I have said that I saw little of actual recitation on the part of pupils. The word recitation, in the sense in which we use it, does not seem to be in the British teacher's vocabulary. And they do not have the term because they do not have the thing. "Recitation" to them means declamation or "oral composition." Of topical recitation, in which the pupil stands and puts his knowledge to the test of oral expression, and of all that give-and-take between pupil and teacher or pupil and classmates which we deem so essential, but very little can be seen by visitors in British schools.

Let me say in closing that I found great pleasure and interest in grappling with the elements of a new and complex system, equal pleasure in the cordial fellowship of our British hosts, and a new and lasting respect for the solidity which everywhere characterizes the achievements, material and intellectual, of a great people, a solidity which when fairly apprehended makes much of that in which we Americans take undue pride seem crude and superficial. Such interchange of visits between goodly numbers of American and British educators cannot but tend toward better mutual understanding and closer affiliation between the two great nations speaking the same tongue and possessing a common literary heritage. May this visit of 1908 not be the last of its kind.

DISCUSSION

D. B. JOHNSON, president Winthrop Normal and Industrial College, Rock Hill, S. C.—Dr. Salisbury has covered the field of this discussion so thoroly, that there is little, if anything, left for me to add to what has been so well presented by him. He does not exaggerate the difficulty of understanding the school system, or lack of school system, of Great Britain. The "caste" feeling in England is very strong and is a great obstacle to improvement in the organization of free public education. In the South we have separate schools for the negroes, but never, as in England, for the poor of our own race.

The fact is that the countries of the old world, with probably the one exception of Switzerland, have not our democratic conception of education—the preparation of the individual for any sphere in life. The idea there seems to be to prepare servants to remain

servants—to train children for the occupations, the trades, belonging to their parents' sphere in life. It is rather remarkable that with such an attitude toward general public education, such a neglect of it until comparatively recently, Great Britain should have done as much for teacher-training as it has. Up to the year 1870, elementary education, so far as it was given in private schools, was supplied mainly by the various religious organizations of the country.

There are now about 150 teacher-training schools in Great Britain, graduating about 1,900 teachers each year, or about two-thirds of the new teachers needed each year. These trained teachers, together with those who have had some training, tho not as extensive as that given these, make the supply of teachers with professional training, more or less good, much greater in proportion to the whole number of teachers than in the United States.

It is an interesting fact, in view of the conditions obtaining with us, that there are about twice as many men teaching in the higher elementary and secondary schools as women. In the elementary schools the proportion is reversed. But men in the old country do not look upon the teaching of little children as we do. In an elementary school in Dresden, Germany, I found a man in entire charge of a class of first-grade children from five to six years of age, and he seemed happy in his work.

The "hostels" or "dormitories," "common rooms," social and religious life, athletics, and absence of coeducation in the residential training colleges of the motherland were not new to me. We have similar conditions in the southern states, where much is always made everywhere of the social and religious life and where the people do not believe in coeducation, holding to the view, old-fashioned mayhap, that a woman's education should be equivalent to that of a man, but not identical.

I was much surprised, however, to learn of the lack of social standing of the teachers of the British Isles, because of the fact that the social standing of the teachers in the South is of the very highest.

I was impressed, as was the writer of the paper, with the faulty methods and arrangements for practice-teaching, and with the hurtful, deadening grip upon all educational effort of the "external" examination, and the placing of the examination, of marks, above everything else. Everybody, everywhere in that country, with few exceptions, seemed to be striving to standardize the human mind for examination purposes. The end of all study seemed to be to make a certain mark demanded by an outside inspector, to pass an examination, and not to gain knowledge and power. The false ideals and mental paralysis that must result from this magnifying of mere marks above power and spirit is appalling to contemplate.

I found only two training colleges with practice schools of their own. All training-college authorities, without exception, who were asked about it by me, admitted that it would be an excellent thing to have a practice school in connection with every training college.

My observations of the schools of Scotland corroborate the statement of Dr. Salisbury, that the educational organization and methods of that country are far better than those of England.

I found that all schools for the training of teachers, with few, if any, exceptions, in Great Britain and on the continent, required much and severe academic work—study of subject-matter—the opinion evidently prevailing that a normal school, while emphasizing professional work, could not afford to neglect scholarship. A great many of them, and the number is growing, give instruction to women in the household arts and in both vocal and instrumental music. The normal schools of the South, notwithstanding adverse criticism from other sections, have been giving instruction in these subjects, including elementary agriculture, dairying, school gardening, etc., for years. The demand for teachers who can teach the common-school branches, and piano in addition, is very strong in the rural districts in the South.

I agree with the leader of this discussion as to what the motherland might teach us to do or not to do.

The tenure of office of teachers in Great Britain is much more secure than with us. A teacher is usually elected for life, his term depending upon good behavior. The kindness and consideration shown teachers absent from duty on account of sickness is worthy of our imitation.

The English pension system is to be commended as a move in the right direction, but it does not yet provide a sufficient support for retired teachers.

Visits such as that made by the teachers of the United States and Canada to Great Britain last fall cannot fail to be productive of great good to both the visitors and the visited. I earnestly hope that this plan of a periodical interchange of visits of the educational workers of this country, Canada, and the motherland may be made a regular custom to the great gain in brotherhood, mutual understanding, and a broader educational view of peoples with a common language and literature and having a common heritage in the moral, religious, and civic ideals wrought out by Anglo-Saxon civilization. The national Civic Federation, Sir Alfred Mosely of London, and J. Bruce Ismay, Esq., President of the International Mercantile Company, deserve the thanks of our people for having arranged for this visit and, in doing so, for having rendered an international service of great and lasting value.

PROFESSIONAL TRAINING FOR TEACHERS OF SECONDARY SCHOOLS

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The work of training teachers for secondary schools is at present divided, in most of the states, between normal schools, colleges, and universities. There is, however, a well-defined movement in our higher institutions of learning, especially in universities, to limit the product of normal schools to the grades and to create a monopoly whereby only graduates of colleges and universities shall be eligible as teachers in secondary schools. On behalf of normal schools we unqualifiedly condemn such movement and protest against the creation of such monopoly. We propose to show: (1) That the normal schools are now doing a large part of this work and doing it so well that no sufficient reason exists for barring them from this field; (2) that universities and colleges are neither by equipment nor ideals properly fitted to train young people for the teaching process. The normal-school system of Wisconsin, more particularly the school at Platteville, the oldest in the state, and the university of the same state furnish in their conditions and organization the greater part of the particulars on which this paper is based. In most of the states, however, relations existing between normal schools and institutions of higher education are so much like those in Wisconsin that with slight changes what is said in this paper may be considered to have general application.

Let it be observed that university graduates have the advantage of normal graduates in being prepared in only university-accredited schools; in being more mature by two years at time of graduation; and in having two years

more of training; yet, in spite of these favoring circumstances, there is no evidence that the university graduate is the more efficient teacher in the ordinary work of a high school.

A recent census of the teachers in the high schools of Wisconsin for the school year 1907-8 shows that during that year 476 people entered upon the work of teaching in high schools in that state. Of that number the normal schools of Wisconsin furnished 146, the University of Wisconsin 121, 36 were not classified, and the remaining 173 were graduates of 66 different institutions—6 of them normal schools, 31 colleges, and 15 universities. By rule of the Board of Normal Regents of the state, graduates of four-year high schools enter the junior year of normal schools, and, as a rule, are graduated in two years. Graduates of schools accredited by the university enter the freshman class of that institution and are graduated in four years. Normal schools exercise no accrediting discrimination.

It is safe to predict that the accessions to the high-school teaching force of our state will be not less than 500 for the current school year, and for some time to come the number will increase yearly. The total number of graduates from the full courses in normal schools for the school year that closed June, 1908, was 507. In that number were included kindergartners, domestic-science teachers, and many specially fitted for grade work, and who under no conditions could be induced to engage in high-school teaching. On the assumption that the normal schools graduate 500 people a year—this year they graduated about 530—it is safe to say that not over 200 or at most 250 of these could be recommended for high-school positions. Of 52 people graduated from the Platteville school in 1908, 15—less than 30 per cent.—went directly into high schools. The Platteville school has never been able to supply the demand for teachers for graded and high-school positions, and I venture to make the same statement as to the other schools of the system. I am not prepared to say to what extent the university has been able to respond to calls coming to that institution for teachers, but should be surprised if the supply did not fall short of the demand. The normal schools place practically all their graduates in the schools of the state.

If the field should be left to the university it does not seem possible that its output could be sufficient for the needs of even one-half of the high schools of the state. At present, statistics show that the university furnishes about one-quarter of the number needed. It seems to me that the conditions are such that if the university and normal schools should each do the utmost possible they could not together supply the demand. The normal schools, seven in number in Wisconsin, *must* prepare teachers for the grades, tho they have no monopoly in that field now, as county training schools and high schools furnish a considerable number.

I frankly admit that I am delighted that it seems impossible for the university to supply the demand. The state will get better service from two competing agencies than from one that has the field to itself. The normal

schools have no fear of such competition, but rather welcome it. Why should not the university, in like manner, welcome worthy rivalry on the part of normal schools?

Universities and normal schools are maintained to accomplish certain ends, not entirely distinct, for the benefit of the state that supports them. The law definitely prescribes the function of Wisconsin normal schools in these words: "The exclusive purposes and objects of each normal school shall be the instruction and training of persons, both male and female, in the theory and art of teaching, and in all the various branches that pertain to a good common-school education and in all subjects needful to qualify for teaching in the public schools." This enactment does not bar other educational institutions from doing a share of the business of preparing teachers for public schools. In this state our high schools are simply the highest grade of common schools, and accordingly such legal provisions as relate to them are found in a chapter of the *Wisconsin Statutes*, under the heading "Common Schools." I speak of this because some have felt that the section of the law just quoted limits normal-school work to the preparation of teachers for grades below the high school. While the law recognizes them as common schools, the decision of the Supreme Court in the seventies settled their status as public schools. These two facts—namely, that high schools are common schools and also public schools—place high schools clearly within the legitimate province of normal-school effort. I believe it would not be unfair to go farther and say that these two facts, considered in connection with the organic law, make it the *duty* of normal schools to cover this ground as far as lies in their power to do so. Certainly there is no evident reason in law or in their record why they should voluntarily or by any crowding-out process discontinue this work, or be made to discontinue it.

In normal schools alone does the business of teaching overshadow every other school interest. There the business is to teach so that teaching power may be developed in the person taught. The purpose is definite and its attainment the object of every effort.

There are several reasons why the duty of making teaching more effective should be specially intrusted to our normal schools. This is the only class of schools charged by law with the duty of preparing teachers for public schools. Other institutions for one reason or another may undertake this work as they do, but at best it must be a side issue, subordinate to the main purpose of the school. A university or college makes acquisition of knowledge or scholarship the supreme object; the normal school magnifies, we hope not unduly, method—the pedagogic side. A university looks at the work of teaching from the side of knowledge, the materials that the mind acts upon; the normal school from the standpoint of the mind that uses the materials for its own growth. The one is concerned almost exclusively with the *what*, the other gives equal prominence to the *why*. In college life things of the understanding are acquired for personal use; in normal-school life the same things are acquired

with the ever-present purpose of adapting them to the use of less mature minds. In that respect college methods are egoistic, while normal-school methods are altruistic. The university interest is centered in knowledge; the normal, in the child. Since scholarship is and should be the chief object of higher education, it is not at all strange that the idea should still be somewhat common that the only equipment needed by a teacher is knowledge of the subject.

Normal schools are especially *equipped* for training teachers while no other institutions are so equipped. The law of our state requires the Board of Normal School Regents "to establish a model school or school of practice in connection with each normal school," for the purpose of affording opportunity for observation and for practice-teaching in the practice school. This is a real school with pupils at the different stages of advancement found in our public schools.

The work done in schools of practice is real teaching and real managing, and differs from independent school work in that each teacher is responsible for only a limited time and limited range of teaching, and that the preparation and presentation are under expert and careful supervision. The pupil-teacher learns to do by doing. Then, at times, an expert shows how some piece of teaching ought to be done, in order that seeing may help the pupil in doing. Thruout the entire school the emphasis is ever laid upon teaching and managing and the relation between these. These outrank everything else in importance. In these schools the conditions are most favorable for giving undivided attention to the main object of the schools—the making of teachers. Without a school of practice the work must be theoretical. Now the theoretical has its value, but chiefly as combined with the practical. It aids in interpreting work observed and thus, to some extent, in actual teaching. But theory alone is far from sufficient. The printed book or the formal lecture is all that theory requires; but only the real class will give practical and profitable experience.

Universities in several states desire to take upon themselves the entire work of preparing teachers for high schools, leaving the grade teachers to be furnished by the normal schools. In some states it is understood that this desire has been realized. In Wisconsin the entire field is now open and has always been open to the university and normal schools, and in spite of the fact that the university, unintentionally or otherwise, exercises domination over high schools thru its unsanctioned system of accrediting, there is no evidence that it has established any title to the enjoyment of the monopoly it seeks to create. The evidence rather points to such title being vested in the normal schools; at least, it is in their favor at present in the ratio of 146 to 121, or about 6 to 5. The normal schools are now doing a considerable portion of the work in question, more than the university is doing, and until it can be shown that they are not doing it acceptably they will resist every effort that may be made to drive them from the field.

In the legislature of 1909, a bill was introduced and definite action postponed to a special meeting to be called by and by, compelling the university

to admit graduates of all four-year free high schools without examination. This is a protest against university domination exercised thru its accrediting system. Normal schools have no desire to arrogate to themselves duties belonging to local superintendents or to the State Department of Public Instruction. They welcome all who can do effective teaching whether they hail from university, college, academy, public, private, or parochial school, or from no school at all. The brand or label of the product is valueless of itself. The great question after all, is, Do they make good? If they can teach they are entitled to the right hand of fellowship.

We must not forget that in a university, composed as it is of many colleges and schools, the temptation is ever present to shift from the course in teaching, which offers neither wealth nor permanence, to law, medicine, engineering, pharmacy, farming, or something else, without any hope whatever that persons from these courses would shift to the teachers' course. This temptation is wanting in the normal schools and is one of the strong arguments in favor of a normal school entirely separate from and independent of an institution of higher grade.

The history of normal departments, schools of education, and teachers' colleges, especially in state universities, up to the present date, offers no encouragement that any university can do more than a comparatively small part of what its ambition might prompt it to undertake. At best a teachers' college in a university, holding the same relation to the university as its other colleges do, is an appendix that could be spared without impairing the general good of the body. The looser the relation the greater the promise of success. Teachers College, Columbia University, New York, appears at first thought to be an exception, but when it is recalled that it is practically independent of the university, it ceases to be an exception. It is not the fault of the university that a teachers' training school cannot thrive as an integral part of such an institution. The natural and unavoidable conditions are unfavorable to any great measure of success, and the surprise is that university authorities do not recognize that truth in view of experience both at home and abroad.

The experience of Germany in its efforts to have the universities train its teachers is interesting as well as instructive. Nine of the great German universities at some time in their history have tried the experiment of preparing teachers, and all but three abandoned the attempt as being unsatisfactory. The three now maintaining teachers' colleges are Heidelberg, Leipzig, and Jena. Heidelberg furnishes practice-teaching in affiliated secondary schools; in Leipzig the teachers' college exists purely as a theoretical seminar; and Jena is the only German university that furnishes its own practice school for training of teachers. After criticizing conditions that existed after the middle of the last century, Rein says: "More and more the conviction grew that the solution of the problem lay in increasing the number of special training colleges and organizing them on a different basis—that of having the theoretical and practical elements of the professional training go hand in hand."

Fries, in summarizing his discussion of the subject, says: "Let the department seminars of the university preserve their purely academic character and undividedly devote their efforts to the high task of broadening and deepening the academic knowledge of their members. Practical preparation for the profession of teaching lies without their sphere. . . . But let the view be done away with once for all that academic efficiency alone qualifies anyone for the work of teaching."

The evidence furnished by the experience of Germany and the testimony of its most noted and experienced educators are almost entirely in favor of institutions for training teachers for all grades, separate from the university and equipped with a practice school representing all grades of the public schools. This evidence is of such character that the universities cannot afford to ignore its lessons.

Should the universities in our western states succeed in having the normal-school graduates barred from employment in high schools, within one year, or two at most, every normal school in the West would be converted into a young ladies' school whose function would be limited to preparing young women for grade teaching. Young men do not and would not prepare for that work. We should consider such a result a calamity for which the universities with all their work could not atone. There is loud and well-founded complaint that our schools are too largely feminized now; the universities cannot afford, deliberately and of set purpose, to create conditions that would provoke louder complaint of this kind.

Universities desire to create a monopoly whereby they may control for their product the best market. If there are plums in the public-teaching service they are found in the high schools, and the universities are planning to corner the whole output. Monopolies are not particularly popular with our people at the present time. Even an educational monopoly might encounter serious obstacles from the sovereign people. The scheme is illiberal, offensively narrow, and has the earmarks of a device for restraint of trade. I have endeavored thus far to show that even if the scheme were best it is not possible, and if it were possible it is not best.

The present seems an inopportune time for universities to seek to add to their domination of high schools. If university authorities will put their ears to the ground, they will hear mutterings loud, angry, and widespread against college domination of high schools in general.

Principal William McAndrew, of New York City, in an article in the *World's Work* for September of last year, entitled "Where the High School Fails," among much that reflects a widespread sentiment, says: "The high school of today is characterized as antiquated, gone to seed, narrow, illiberal, exclusive, and aristocratic." The dominating power is blamed. For Mr. McAndrew goes on to say: "The course of study is not a continuation of the common-school course; it comes down like a stalactite from above. The question of high-school management has not been, What are the most useful

ways in which these young people can spend their time? but, What do the college examinations require?"

Normal schools may not be able to meet the demands of our high schools to the fullest extent; but they are much more likely to do so than the universities. The normal schools are much nearer the people than the universities: the expense of a normal-school education is much less than that of a university—to the student not more than one-half, to the state probably about one-third; and what is the most important of all, the normal-school teacher is chiefly interested in seeing the pupil develop those traits of body, mind, and character that promise success as a teacher.

In summing up let me say: While the normal schools scarcely hope to do more than a fair proportion of the work, they *can* do for they *are doing* and *will continue to do* as much of it as the state thru its legislature will give them means to carry on in a thoro, business-like, and professional manner. They are chartered to do this work, and if it should be found that they cannot or will not do it in a manner satisfactorily to compete with the universities, let the people recall their charter and intrust this greatest of all educational work—the making of teachers—to some more competent, more efficient agency. Until they have been convicted of incompetence or unwillingness to meet the demands that come to them, it is an outrage of justice to penalize them by the withdrawal of this great stimulus to effort and excellence—namely, the preparation of teachers for secondary schools.

PROFESSIONAL TRAINING FOR TEACHERS OF SECONDARY SCHOOLS IN COLLEGES AND UNIVERSITIES

THOMAS A. HILLYER, PRESIDENT OF STATE NORMAL SCHOOL,
MAYVILLE, N. DAK.

It would be a good thing if the training of teachers for the public-school system, broken to pieces and scattered about, as it is, among many kinds of institutions, could be gathered up and placed only in hands worthy of the undertaking. Few will deny that this great task ought to be divided between the normal schools on the one hand, and the colleges and universities on the other. This division of labor would be necessary, if nothing but the mere amount of the work were considered. Neither the normal schools nor the colleges and universities could even approximate the fulfilment of the undertaking, if acting alone; nor could they do so, if acting together. And when the variety of the work is considered, it appears as reasonable that neither the normal schools nor the colleges and universities should be expected to attempt the whole of it. The task should be so divided between them that each part may fall where it can be done to the best advantage.

The important question then arises as to how the training of public-school teachers should be divided between these institutions. It seems settled that the normal schools are to have a monopoly of the training of teachers for the

elementary schools, so far as interference from the colleges and universities is concerned. The colleges and universities have not seriously entered this field, nor are they likely to do so, except for the sake of illustration in their study of the science of education. It seems to be determined, also, that the colleges and universities *may* train teachers for the secondary schools, but it is not agreed that they may have a monopoly of this work. It has lately become a much-debated question as to whether the colleges and universities alone are to train teachers for the secondary schools, or whether this work is to be shared by the normal schools. It is with a full consciousness of the constantly increasing difference of opinion as to this question that I briefly undertake in this paper to support the doctrine that teachers for the secondary schools should be trained in colleges and universities, and not in normal schools.

Why should not the normal schools extend their courses of study to include the necessary college and university work, and share with the colleges and universities the training of teachers for the secondary schools? Other reasons might be given, but the one which ought to be convincing and decisive is that the normal schools have much more than enough to do, and a much greater opportunity for valiant service than they can ever use up, in the training of teachers for the elementary schools—graded and ungraded, in country, village, and city—without assuming responsibility for the training of teachers for secondary schools, a thing which they cannot do without crippling their efforts in the training of teachers for the elementary schools.

There was a time when the colleges and universities were hostile to the idea of professional training for a teacher. While that was true, these institutions did nothing, so far as such training is concerned, to help the secondary schools. There was then good reason why a few of the normal schools, knowing well the benefit to the elementary schools of professionally trained teachers, should not only desire to see the secondary schools improved in a similar manner, but even proceed to set the colleges and universities an example of training teachers for these schools. But the situation is now changed. The colleges and universities, thanks to the influence of the normal schools, have not only acquired a sympathy with the idea of professional training for a teacher, but are eagerly and extensively active in carrying it into practice. This change upon the part of colleges and universities is the most fortunate because it removes the difficulty of placing the training of teachers for secondary schools into their hands, where it properly belongs; and, also, because it renders it less and less necessary for the normal schools to feel responsibility for the training of teachers for the secondary schools, and to withdraw their effort from the training of teachers for the elementary schools.

It is claimed that it unwisely restricts the normal schools to limit them to the field of elementary education, that no barriers to their activity should be set up, and that expansion should be freely permitted. Restricting the usefulness of the normal schools by limiting them to the great field of elementary education is like depriving a man of liberty by allowing him only this earth

to live upon. The normal schools can develop and expand, and extend their usefulness, without any visible limit, wholly within the field of elementary education. No other field is as vast in extent, no other presents as many or as great problems and opportunities; and, if the country and village schools, long enough neglected, be remembered, no other is in as great need of the service of professional education.

Normal schools have hedged in their own activity and have never done much of anything outside of training teachers in a narrow, classroom sense, however great and good a thing that may be. They have limited themselves almost entirely, so far as special training is concerned, to the why, what, and how of classroom instruction and discipline. The training of a mere teacher does not constitute the whole field of the legitimate effort of normal schools in their attempt to help the elementary schools. Normal schools could do much more than they have ever attempted in the distinct training of village and ward principals, county superintendents, and any others whose duties lie wholly or partly upon the side of the organization and administration of elementary schools. And there is the whole and almost untouched problem of improving the conditions of country and village life thru the exploitation of agriculture, manual training, and domestic science—the solution of which is more properly expected of the normal schools than of any other institutions, because of the peculiar position that they occupy with respect to all elementary schools. If the normal schools could awake to all that the elementary schools are demanding of them, and if they would then undertake the complete discharge of their plain duty, they would feel no restriction of opportunity, no barrier to expansion, and they would hear no call to train teachers for the secondary schools.

In limiting the normal schools to the service of elementary education, they are only held to the performance of what was not only originally but wisely expected of them. It is true that, before the secondary schools appeared, the normal schools served the whole public-school system which then consisted of the elementary schools only. But it does not follow that the normal schools should now serve the whole system which has since come to include the secondary schools. It is more reasonable that the secondary schools, entirely distinct from the elementary schools, so far as fundamental purpose is concerned, should look elsewhere than to the normal schools for their general guidance and inspiration. Until the obligation of the normal schools to the elementary schools is met, and there remains upon their part a surplus capacity, they are not justified, by any present changes of educational conditions, in any attempt to exceed the limit of their original and logical field of operations. There is no probability that such a time will ever come, or that the colleges and universities will ever sufficiently forget their well-learned duty to the secondary schools to make it necessary for the normal schools to leave their own work and go to the rescue. It is undoubtedly true that normal schools, in the pursuit of their own duty of training teachers for the elementary schools, may

incidentally give their students many of the qualifications needed by teachers in the secondary schools, especially those doing the more elementary work, but this should be the extent of the effort of the normal schools in training secondary teachers.

Some normal schools have extended their courses of study, thus converting themselves over into so-called normal colleges, and have permanently undertaken the training of high-school teachers. They may be able to demonstrate that they can turn out graduates better able to teach in secondary schools than teachers who have had no special training; but this is no assurance that their graduates are as well trained for teaching in the secondary schools as they would be if trained in colleges and universities, or that their total influence, while training teachers for the secondary schools, either in their own states or in the country at large, is any better, or even as good, as it would be if exerted wholly in the interests of elementary education. The example of these normal schools, which is virtually the same as that of the southern state which recently proposed to change all of its four or five normal schools into normal colleges, ought not to be imitated thruout the country. It may be well meant and it may be fully justified upon the part of a few excellently equipped schools which might be named, but it illustrates a policy which, as a general practice, and in the long run, would enable the normal schools to help the secondary schools only by slighting their primary duty to the elementary schools.

It is reported that the Carnegie Foundation declares, in refusing its benefits to certain universities that have sacrificed standards of scholarship for the sake of large enrollment and immense equipment, that the mania for bigness is the worst evil among higher educational institutions of all classes. Normal schools are not innocent of this charge and are as likely as other institutions to be led astray by false ideals. It would be interesting to know to what extent the present desire upon the part of many normal schools to become normal colleges is due to the mania for bigness.

Normal schools should not feel, in these days when the secondary schools are developing so rapidly and attracting so much attention, that in training teachers for the elementary schools they are doing a thing less worthy than the colleges and universities are doing, in training their own and secondary teachers. Normal schools that are not perfectly satisfied and that do not find genuine delight in sending trained teachers to minister to children in country districts and town grades, and that are jealous of the institutions that train teachers for higher schools, lack much of the true educational spirit. Let the normal schools be jealous only of their own rich and boundless opportunity. They ought to appreciate the magnitude and the variety of the things that they can do for the elementary schools, and to understand, if they wish to help the secondary schools, that they can best do so by strengthening elementary education—the foundation upon which secondary education is built. They ought to see this most significant thing of all—that they train teachers who touch the lives of children in the earliest and tenderest years, and for this

reason their influence is almost surely more vital than that of the institutions training teachers who influence the lives of pupils at later stages. Normal schools that do not hear the crying demand upon them for more and better-trained teachers for the elementary schools are deaf; and, if they do not see the boundless opportunity before them, without undertaking the training of other teachers, they are blind. If any normal school is committed to the notion that it is fulfilling its mission to the elementary schools and that it is therefore justified in taking up the training of teachers for secondary schools, it ought to compare itself to the individual who thru ignorance, discontent, or overwrought ambition leaves but half-done his own business in order that he may attend to that of someone else.

So much about normal schools has seemed necessary because it indirectly strengthens the position that the responsibility for training teachers for the secondary schools should rest upon the colleges and universities alone.

There is an important lesson concerning the qualifications of teachers that the secondary schools may learn from the experience of the rural schools. The lesson is that the welfare of the individual pupils of a school, as well as the general progress of the school, depends in a far greater degree upon the superiority of teachers than anything else. The country schools have made but little progress chiefly because their teachers have been hardly more capable than their pupils. The teachers in these schools have usually been but barely able to get the cheapest form of teacher's license and correspondingly incompetent to instruct and inspire their pupils.

The high schools have never suffered from this cause in the same degree in which the rural schools have, but they are not sufficiently provided for when their teachers are but graduates of normal schools, or even normal colleges. The collegiate and university work, especially that of an academic character, attempted by normal schools and normal colleges and done, as it is, alongside, and often by teachers of high-school and elementary-school grade, cannot have the same scholarly and liberalizing excellence that it has when isolated in colleges and universities. It is neither untrue nor unfair to say that many normal schools and normal colleges still have much of the pedantic and ultra-professional character once so universal, arising largely, and perhaps inevitably, out of the elementary work they are obliged to do which is not liberalizing and scholarly, even in the training of teachers for the elementary schools, and which renders them especially unfit, so far as this characteristic is concerned, to train a teacher in the rich and bounteous way in which a high-school teacher should be trained. The colleges and universities are pre-eminently the places where teachers for the secondary schools should be trained, not only because their work is sufficiently advanced beyond that of these schools, but because their general intellectual and spiritual atmosphere, rather than, or at least in addition to, that of the normal schools and normal colleges is distinctly of the sort which the secondary schools most need. Secondary schools will retard their own progress if they accept teachers trained

only in normal schools and normal colleges, when it is possible for them to obtain teachers trained in colleges and universities.

When boys and girls pass from the elementary into the secondary schools, they do so with a radical change in their point of view. In the elementary schools they are chiefly concerned with those elementary things that all people should know regardless of any distinctions whatever. There their work, tho of primary importance, is relatively narrow. In the secondary schools they are given much larger liberty and are thrown much more upon their own responsibility. Their life interests, formerly latent, now become prominent and diverge in the wider and more varied field before them. They form and pursue different ideals—preparation for college or a vocation, broad culture, etc. This new situation in which the pupils of secondary schools find themselves, greatly widened, deepened, and diversified, as compared with that of the elementary schools which they have left, demands that high-school teachers must have in a superlative degree the essential qualifications of all teachers, and even distinct and special ones of a high order. Such qualifications, so far as they lie upon the side of broad social sympathy, liberal-mindedness, broad and special scholarship, scientific spirit and method, and love of service are to be expected in the highest degree of teachers trained in colleges and universities rather than of those trained in normal schools and normal colleges. Somebody has said that any teacher's equipment ought to be so liberal that in her work she might not have to walk upon the edge of her possessions in constant danger of falling off. The normal schools and normal colleges are well able to remove teachers in the elementary schools from this danger; but it is distinctly the colleges and universities, with their more advanced work, their more scientific spirit and method, and their more liberalizing and stimulating influence, that are needed to equip teachers for the secondary schools who shall be inexhaustible sources of knowledge and inspiration to their pupils.

WHO SHOULD DETERMINE STANDARDS AND COURSES FOR THE TRAINING OF TEACHERS AND HOW SHOULD SUCH STANDARDS BE DETERMINED?

A. O. THOMAS, PRESIDENT OF STATE NORMAL SCHOOL, KEARNEY, NEBR.

The situation.—We can speak of *the* college and *the* university, but cannot speak of *the* normal school. Colleges and universities have crystallized their traditions and history into definite standards. Their entrance requirements, requirements for graduation, and courses are now largely uniform. Requirements for one college are usually accepted by all. The present system of accreditation for colleges and universities has unified the work to a large degree.

It is not so with normal schools. Perhaps it is because normal schools represent the last phase of public education to be developed, and sufficient time has not elapsed to produce definite standards. Perhaps it is because

of well-defined feeling on the part of other departments of public education that normal schools have no right to tinker with academic instruction pertaining to content and culture subjects, and should confine themselves to a little methodology, simple remedies, and advice. Their usual attitude is that "while we could do little good, we would do little harm if confined to our proper sphere."

Being so much older and holding the office of protectorate, the college and university, in many instances, have attempted to define our standards. But we are fast coming into our own heritage, and even those who held as their creed that "Knowledge is power," "To know is sufficient to teach," "Those who have knowledge will find a method" are coming over to some of our lately developed standards, are admitting there is a science of education. Even those who have held that normal schools should fit teachers only for the elementary schools, and that the colleges and universities should fit teachers for high schools, are now demanding that teachers in high schools have the same forms of observation, practice, and methodology that normal schools give to elementary teachers.

Public normals differ widely in standards and courses. It is hard to find two schools in different states with the same entrance requirements, with largely the same courses of study, and with the same standards for graduation and certification. Each state has attempted to solve its own problem. Its entrance requirements, requirements for graduation, its curriculum, its field of activity, and its ideals and aims are largely influenced by local conditions.

As the public university was the first to develop, it very naturally was jealous of any other child of the state that attempted to draw nourishment from the same source of support, the public treasury. There should be little cause for rivalry and feeling upon the part of these two factors in public education, even tho they draw support from the same source.

Technical school.—The university gathers about it schools of law, of medicine, and of theology; also, its department of education. The work of the general courses of the university counts as a part of the course in the department of education, and the work of the department counts in completing the courses for diplomas and degrees. It is not so with the schools of law, of medicine, and of theology. Strong content and culture courses are required for entrance into these schools, but the work of the special school does not count on the general courses of the institution for diplomas and degrees. This is, no doubt, because the lore of these professions is not found in the general curriculum, while the material with which the teacher deals is.

The content and culture subjects cannot well be separated from the *how to teach*. There are vastly more engaged in teaching than are engaged in law, medicine, or theology. Moreover, the character of the school must determine the character of the civilization, and every child must receive its instruction thru this source. Its importance, therefore, is so vast that a special department of public education especially for the preparation of teachers is justified.

The best work may be accomplished in the true atmosphere of a school especially prepared and endowed for this purpose. There should be no overlapping of normal schools and universities, and no quarrel between them. The department of education in the university is also justified as a graduate school for more extended research along the lines of psychology, history of education, systems of education, and related subjects. It should require just as strong academic preparation for entrance as other graduate schools require.

Normal-school standards have been determined largely by outside influences, but the movement is now sufficiently advanced and established to have definite standards and ideals of its own. The normal school of the future will not only determine its own standards and courses of instruction, but it will be the pacemaker for the great system of public instruction; it will take the advanced ground on every subject, work out new methods and new devices and new fields of research. And why not?

Those who teach in the departments are ranking in scholarship and culture with those who teach in the departments of colleges and universities. Moreover, they are constantly surrounded by the atmosphere of the profession and are constantly searching among the foundation stones of education for greater strength. The fact that leading normal schools of the country are engaging professors of well-known scholarship and ability is doing much for our independence and giving a chance for normal schools to be leaders in all educational movements.

Professional schools for teachers are governed by the prevailing conditions in the various states, and such conditions differ widely. In one state a pupil who has completed the eighth grade may enter. Some states require one year of high school, some two, and some four. Some schools require two years above entrance requirements for graduation, some four, and a few five. Some schools require much academic instruction well-seasoned with professional, while others cling to the old idea that method is largely the function. We are now sufficiently advanced in the education of teachers to work toward what may be called a standard American normal school.

Recently this department undertook to define its policy and to set up some standards toward which normal schools all over the country may work. We shall be very much stronger and compel much greater respect from other educational institutions when our standards, like those of the college and university, become constant. At the Cleveland meeting this department produced a statement of policy which should do much to bring about uniform conditions. This statement of policy should be extended into a statement of standards upon all phases of normal-school work.

My position that normal schools should determine their own standards and courses and that they are abundantly capable of so doing is sustained by sec. 5 of the "Statement of Policy" developed last year by this department, viz., that while the normal school is not the only agent for the training of

teachers, it is the state's chief agent, and as such it should set up standards of teaching, determine ideals, and train men and women whose call is to educational leadership.

Relative to the second part of the question—"How should such standards and courses be determined?": The standard should be determined by the needs of the schools into which the product of the normal school goes. The preparation of the student should make him of the greatest value to the public system of education. This does not preclude the working-out of advanced ideas and ideals. Usually the demands made upon us are prompted by present-day needs rather than in the light of future progress. The public, as a rule, is interested largely in the needs of the present and in present-day problems. If their demands are filled, it may mean present efficiency but little progress. If we expect progress, we must constantly hold out elevated standards; there must be a reaching-up on the part of the public if the rules of progress are sustained. The public, therefore, is not the proper agent to establish the standards of those who are leaders in education. Normal schools are themselves best able to establish and maintain standards. The normal school should be the pedagogical laboratory from which grow the changes in standards and methods.

I do not mean by this that it should be the birthplace of fads and fancies, but it might be excused if it has a few of them. A fad which becomes permanent becomes a reform; a reform which fails is a fad. A great many new things are being tried out in these days. Many of them must fail because of the lack of efficient teachers and leaders. Such innovations as manual training, domestic science, agriculture, self-government in schools, and many others, all good in theory and proper to become a part of the public-school curriculum and even demanded by modern tendencies and conditions, have fallen more or less into disfavor because they have presented a smattering rather than a definite education. The lack of teachers to handle these splendid and much-needed phases is largely responsible. The technical school of education should equip teachers for these different phases. The reclaiming of waste places in education and the standardizing of new phases should be theirs. In standardizing its own course of study the normal school must necessarily fix the standard for public education.

In introducing new phases into the curriculum and in carrying into effect advanced ideas, the first and most essential feature is the preparation of teachers capable of successfully coping with the environment as well as with the materials.

This department should take some action relative to the standardizing of normal schools, the standards to be based largely upon the Statement of Policy adopted by the Cleveland meeting. There should be a committee appointed consisting of eight members, distributed widely enough over the states to study the whole problem in order to found the results upon an intimate knowledge of existing conditions. This committee should be composed of a member

from each of the groups of states—the New England, Middle Atlantic, East Southern, West Southern, East Central, West Central, North Pacific, and South Pacific—making eight members. This committee should be financed by the National Association. Each member should make his investigation in his own section and embody his investigations in a report to the committee. The conclusions should be assembled into a statement of standards covering the following points: equipment; course of study; observation and practice schools; entrance requirements; requirements for graduation; and degrees and requirements in selecting faculties.

While it might be impracticable for all schools to come to this at once, it would set a wholesome ideal and stand for the American standard normal college. Under entrance requirements should be considered: first, academic standard; second, moral character; third, physical fitness; fourth, native ability to teach.

If normal schools are to win their way quickly, they must use a sifting process in admitting students. The anxiety to enrol large numbers as a first consideration has worked harm to the cause. We must prune the vines carefully if we expect to market the choicest fruit.

The report on equipment should set some minimum standard and include size and arrangement of observation and practice schools, as well as apparatus.

In arranging courses of study, the first consideration should be a thoro mastery of the branches required in the public schools, with sufficient knowledge of general content and culture subjects to enable the teacher to lead her pupils into interesting and attractive fields in order to inspire them with a desire for a more complete education. There should also be a just balance between the academic subjects and those subjects known as technical. Attention should be given to the sequence of studies.

In providing for degrees, care should be taken not to depreciate similar degrees offered by college and university courses. There should be approximate standards for the selection of faculties. Members of such faculties should rank in academic attainments with college professors, and should also possess special discipline from the side of teaching. Standards of morality should be taken into consideration. It is said that in many of our larger colleges and universities little attention is paid to this side in selecting professors. The range of influence of the normal-school professor is more far-reaching. They are more largely examples, and only those of clean lives and lofty ambitions should be considered.

With proper care in working out the details of such an institution, the normal school would become what it should be—the center of our great public-school system instead of a side issue.

DEPARTMENT OF MANUAL TRAINING

SECRETARY'S MINUTES

OFFICERS

President—JAMES E. ADDICOTT, Felton, Cal.

Vice-President—MISS EDNA D. DAY, Columbia, Mo.

Secretary—MISS ELLEN M. BARTLETT, San Francisco, Cal.

FIRST SESSION.—TUESDAY FORENOON, JULY 6, 1909

The department met in the Central Presbyterian Church.

The president's address, "Definitions Pertaining to Industrial Arts," was given by James E. Addicott, of Felton, Cal.

The next topic, "Assuming That Our Public Schools Are Expected to Offer Vocational Training, Should Manual-Training Schools Offer Trade Courses, or Should Special Trade Schools Be Established?" was discussed by:

a) Charles H. Keyes, supervisor of South District Schools, Hartford, Conn., from the standpoint of educational interests;

b) W. J. Kerr, president of State Agricultural College, Corvallis, Oregon, from the standpoint of agricultural interests, and

c) J. C. Monaghan, secretary of the National Society for the Promotion of Industrial Education, New York City, from the standpoint of economic and manufacturing interests.

A general discussion followed, led by Clifford B. Connelly, assistant director of Carnegie Technical School, Pittsburg, Pa., and participated in by Mrs. Ida Hood Clark, director of elementary manual training in the public schools of Milwaukee, and others.

The following committees were appointed by the president:

COMMITTEE ON NOMINATIONS

C. B. Connelly, Pittsburg, Pa.

C. J. Kissler, Boulder, Colo.

R. A. Russ, Pittsburg, Kans.

COMMITTEE ON RESOLUTIONS

A. B. Clark, Stanford University, Cal.

C. Valentine Kirby, Denver, Colo.

Gertrude R. Smith, New Orleans, La.

SECOND SESSION.—WEDNESDAY FORENOON, JULY 7, 1909

The department met in joint session with the Department of Art Education, to consider the topic, "Art as Related to the Industries."

A. B. Clark, head of department of graphic arts, Leland Stanford Junior University Stanford University, Cal., discussed the topic from the standpoint of art;

Miss Ednah A. Rich, principal of State Normal School of Manual Arts and Home Economics, Santa Barbara, Cal., discussed it from the standpoint of manual training, and

Arthur H. Chamberlain, dean of department of education, Throop Polytechnic Institute, Pasadena, Cal., discussed it from a general educational standpoint.

A spirited general discussion followed these papers.

Arthur H. Chamberlain of Pasadena, Cal., then submitted the following report, which was on motion adopted:

REPORT OF THE COMMITTEE TO CONSIDER THE ADVISABILITY OF MERGING THE DEPARTMENT OF ART EDUCATION AND THE DEPARTMENT OF MANUAL TRAINING INTO ONE DEPARTMENT

Your Committee respectfully submit the following report:

We find the following disadvantages likely to result from the proposed combination:

1. A combined department would mean growing numbers in attendance, and as numbers increase the possibilities for discussion diminish. In other words, interest might lag, as fewer people could take part.

2. If the officers of the combined department were less in sympathy with one phase of the arts than with another, a given meeting would tend to be narrow, in that attention would focus in one field.

The following advantages are urged in support of the proposed combination:

1. The general tendency of the Association is toward a reduction in the number of departments. The Association has appointed a committee to consider this whole matter. The reasons for reduction are:

a) The Association is becoming unwieldy with the increasingly large number of sections or departments.

b) The cost of conducting the general association is thereby increased.

c) Fewer departments and superior meetings mean greater efficiency for our work.

2. In the immediate past most of those who were interested in the art section were also interested in the manual-training section. This is especially true when considering those who have done the most effective work in both art and industrial lines.

3. In the last analysis the two subjects, art and manual training, considered from the standpoint of the school, are one. There can be no effective work done in art education unless this work finds application in concrete form. There can be no real constructive work, no industrial or manual-training work of the first class, unless the basis for such work is laid on the principles of design. The truly useful must be artistic.

As it is now, there is great difficulty experienced in co-ordinating the two subjects. Thru combined meetings a proper adjustment may more readily be reached than would otherwise be the case.

Home economics, domestic art, domestic science, or any other of the household arts, now must find consideration in the Manual-Training Department. A fairly satisfactory adjustment has been reached here by a satisfactory apportionment of time. The domestic-art subjects should have a much closer relation to the art department than they now have. Hence, all manual-training, art, and home-economics work should be centered in one department, and proper attention given to each.

All of the above-named subjects properly fall under the general head—The Arts. We therefore recommend that this combined department be called "The Department of Arts and Industries."

Care must be exercised in the choice of officers, the first year particularly, while the movement is being launched. A president should be chosen who has a thoro sympathy with the art and design features, with manual-training and industrial education, and with the various phases of the household arts, and, in addition, has a broad outlook on education in general and who will allow no narrow influence to come in to warp his views. All of which is respectfully submitted,

(Signed) ARTHUR H. CHAMBERLAIN, *Chairman*
C. VALENTINE KIRBY
FLORENCE E. ELLIS

THIRD SESSION.—FRIDAY FORENOON, JULY 9, 1909

"The Influence of Industrial Arts and Sciences upon Rural and City Home Life" was the subject of the paper given by Cree T. Work, president of the College of Industrial Arts, Denton, Tex.

Mrs. Ellen H. Richards, instructor in Massachusetts Institute of Technology, Boston, Mass., considered the subject from the standpoint of domestic science.

Albert Salisbury, president of State Normal School, Whitewater, Wis., presented the economic interests of the same topic.

A general discussion, led by Lloyd E. Wolfe, president of Vocational School for Boys, San Antonio, Tex., followed.

The Committee on Resolutions submitted the following report:

RESOLUTIONS

Be it resolved, That the thanks of the Departments of Manual Training and Art be extended to the Chairmen and Secretaries of these departments for the labors which they have so effectively performed in our behalf.

Be it also resolved, That a sense of our appreciation be expressed to the local committee of arrangements for the excellent accommodations arranged for our comfort and the exhibits displayed for our instruction.

We also express our thanks and congratulations to the drawing and manual-training teachers of Denver for the excellent exhibits which they have provided, from the Denver grade schools, the Denver High School, and the Denver Manual-Training School.

We would express similar thanks for the extremely meritorious work sent for our profit from: The School of Education of the University of Chicago; from Pratt Institute, Brooklyn; and from the public schools of St. Louis.

We also acknowledge the courtesies extended to the department by citizens of Denver as follows: Mr. William Shaw Ward, director of the Museum of Art and Natural History; Miss Stiles, of the Oakes Home Art-Craft Shop; Mr. Boutwell, of the Boutwell Arts and Crafts Shop; and the artists of the Brinton Studios.

Committee on Resolutions { A. B. CLARK, *Chairman*
C. VALENTINE KIRBY
GERTRUDE R. SMITH

The Nominating Committee, which was a joint committee of the departments of Art Education and Manual Training, reported as follows for officers of the newly organized Department of Arts and Industries:

For *President*—J. C. Monaghan, secretary of National Society for Promotion of Industrial Education, New York, N. Y.

For *Vice-President*—Miss Ednah A. Rich, principal of State Normal School of Manual Arts and Home Economics, Santa Barbara, Cal.

For *Secretary*—C. Valentine Kirby, Manual Training High School, Denver, Colo.

The report of the committee was adopted.

On motion of Professor A. B. Clark, of Stanford University, Cal., it was voted that the outgoing officers be requested to act with the newly elected officers in conference with the Board of Directors in determining upon the organization and administration of the combined departments of Art and Manual Training.

The department then adjourned.

ELLEN M. BARTLETT, *Secretary*

PAPERS AND DISCUSSIONS

PRESIDENT'S ADDRESS

DEFINITIONS PERTAINING TO INDUSTRIAL ARTS

JAMES E. ADDICOTT, PRESIDENT OF DEPARTMENT OF MANUAL TRAINING,
FELTON, CAL.

In the early stages of civilization education was almost wholly practical and vocational. Education was a means of satisfying the demands made by society upon its individual members. Later, as was the case in Athenian culture during the Periclean Age, the individual was allowed educational rights and privileges over which society exercised no control. From the age of Pericles down to the twentieth century, educational ideals have swayed back and forth between the double purpose of training the individual to his fullest physical, intellectual, and spiritual capacity, and of compelling the individual to conform to the desires and standards of society.

In the recent past education has concerned itself very largely with the psychological problem of how to develop the capacities of the individual; at the present time we are getting a broader sociological view showing the desirability of adjusting the individual to the needs and purposes of society. In other words, society is demanding that our education shall train more directly for vocational and practical life-work.

There is now a general and profound awakening to the needs and purposes of industrial education, both agricultural and mechanical. The vocational trend in education is rightly demanding a greater share of time, and the cultural point of view is gradually being adjusted to the demands of society for a more practical and direct training in our public schools.

On the first day of last January the president, secretary, and heads of departments of the National Education Association met in Chicago to discuss and organize plans for the program of this Convention. As has been true in nearly every educational gathering of recent date, manual-training and trade schools were discussed, and, as usual, conflicting and distorted ideas were expressed regarding the meaning and purpose of the various phases of industrial training as conducted in our schools and colleges.

Regardless of their real significance, terms are quite generally being used describing the different branches and schools of mechanic arts. The old lady invalid when asking at the bicycle shop for some new rheumatic tires for her chair wheels was no less careless in her diction than many advocates of industrial training. At a recent county institute I heard a principal argue strongly against manual training in the schools because his boys already were compelled to spend too much time in digging potatoes, milking cows, hoeing corn, and other chores.

It is not uncommon to find teachers who know no difference between manual-training schools and trade schools, and in the ranks of our profession may be heard advice to erect and equip polytechnic institutes to train the truants and incorrigibles into industrial habits. It is not surprising that teachers, superintendents, and college presidents, as well as laymen, are bewildered when we recognize, in the various cities of our country, schools offering exactly the same courses in both academic and mechanical work, but designating them respectively (and doubtless respectfully) in the different localities as technical school, manual-training school, trade school, polytechnic school, industrial school, and school of mechanic arts.

As members of the Manual-Training Department, we should put forth renewed efforts to say exactly what we mean, as far as it is possible. We are in serious need of a more uniform nomenclature. Would it not be well worth while for this department to authorize the appointment of a committee to consider with the greatest care the terms used in industrial education and report its recommendations at our next yearly session?

Possibly the first great mistake was in adopting the term manual training for a training which was in the beginning, and probably always will be, regarded

as mental training. Because of this unhappy phraseology it has taken the public generally nearly thirty years fully to comprehend the meaning of manual training; and we cannot be sure at present that the term has a definite meaning even in the minds of manual-training instructors.

The desirability of a more uniform interpretation of terms relating to industrial arts must be apparent to all. At the Chicago meeting previously referred to it was thought best to give some place on this program to a careful consideration of these terms.

It should be remembered that practically all phases of industrial arts, both agricultural and mechanical, are necessarily interrelated, consequently no segregation of mathematical accuracy is possible. Again, all phases of industrial arts are being readjusted, in fact they may be said to be in such a chaotic state at the present time that definitions acceptable today may be worthless or untrue tomorrow. The definitions suggested are for careful thought and discussion rather than for passive acceptance.

In our discussion of industrial phraseology let us proceed from general to specific terms; let us consider first what is meant by practical in its relation to the theoretical, for these two terms are closely associated in turn with their correlatives, vocational and cultural.

Every aspect of education shows either a practical or a theoretical trend. At present the tendency away from the merely theoretical toward the practical commands an almost universal interest.

Theory is very largely the result of experience; in a broad sense theory is practice in abstract form. Weak theories are in most instances due to lack of experience. Sound theories and right practices agree perfectly. How to harmonize these two tendencies of education is the supreme task of the student and educator.

Any attempt wholly to separate theory from practice would diminish the efficiency of both. It is impossible to decide which is of more importance, because in a broad sense neither theory nor practice exists separately. They are interdependent and fundamentally related and should not be so commonly contrasted as is customary in educational discussions. Contrasting the elements of theory and practice is of much less importance to the educator than a clear and definite knowledge of their interrelationships.

The wisest theorists recognize the importance of testing their theories by trying them to see if they will work. Likewise the most practical and successful men of affairs realize the importance of comparing results with the theories and works of others.

The interrelationships between the vocational and the cultural aspects of education are just as close and just as essential as the interrelationships between the practical and the theoretical.

In the professional schools and colleges, such as normal schools, colleges of law, of divinity, or of medicine, there is no longer any disposition to question the cultural value of the work offered; nevertheless, these are distinctly

vocational schools. In the near future when the full purpose of education is better and more generally understood, our industrial institutions will share the so-called cultural honors with professional schools and colleges.

While the writer regards education for each individual as an initiatory process, nevertheless, if we are to be in any way scientific and wish to define terms, it will be advantageous to think of education in its various ramifications and arrange terms accordingly.

Education may be considered as vocational or cultural depending upon the purpose—the vocational corresponding with the practical and the cultural being more closely related with the theoretical. We are all familiar with the so-called cultural schools and subjects offered: languages, history, mathematics, and recently science has been included. Vocational schools may be either professional or industrial. There is a long list of professional schools: normal schools, theological seminaries, schools of music and art, colleges of medicine, law, etc.

Under industrial there are two well-defined, tho not distinct, divisions—agricultural and mechanical schools. In the field of agriculture there has been an effort toward a scientific and uniform phraseology. Such terms as agronomy, zoötechny, horticulture, viniculture, and rural engineering are supposed to cover distinct fields of work and are thus used with a fair degree of uniformity.

There are a few college courses in the mechanical field, such as architecture, irrigation, and electrical engineering, having well-defined meanings; but in our secondary schools there is a most alarming jumble of terms and phrases relating to mechanical courses and schools. We have the four names—manual training, polytechnic, technical, and mechanic arts—to represent exactly the same lines of mechanical work, and these schools include also fairly uniform courses in fine arts, domestic science, and domestic arts, for girls.

Would it not be less confusing if polytechnic, technological, and household arts were used to describe mechanical and domestic courses in colleges and institutes, and manual training and household arts used for similar work in the secondary schools?

Then omit the word technical from the list of mechanical schools. The training of an artist, a musician, a teacher, a minister, or a physician requires as much, if not more, technical instruction than the training of a carpenter, a blacksmith, a milliner, or a cook. Technical and vocational are broad synonymous terms, in fact both wholly include polytechnic, agricultural, industrial, and professional. If used in a narrower sense, technical training must be wholly associated with trade instruction.

While there are specific mechanical lines of technical and vocational training which are obviously in need of development for the benefit of the trades, nevertheless, it would seem unwise to use such broad general terms to describe specific work for which there is already an oversupply of descriptive terms.

There are some reasons for applying the word *polytechnic* to such high schools as are doing the equivalent of college work in their advanced classes. It is not necessary, however.

Selection and elimination are obviously required in reference to household-arts courses for young women. Here we find six or more ways for saying the same thing. We offer our girls in one school the domestic arts and sciences, in another household economy, in another household arts and sciences, in another home economics, in another domestic economy, and in still another household management. In our efforts to be dignified we often fail to convey the idea that artistic needlework and scientific cooking are the two essential branches which these terms are commonly used to picture.

The term "manual training" has been loosely applied to all sorts and kinds of work, from stenography, clay-modeling, and whittling, to college industrial courses. Even manual-training specialists and tradesmen find much difficulty in distinguishing clearly among industrial, trade, technological, and manual-training schools. The work of each of these schools is similar in many respects to that of the others. Each lays special emphasis upon scientific and mathematical subjects in preference to language and history. The hand courses offered are drawing, designing, and tool work, with special attention given to the transforming of materials by means of tradesmen's tools. Altho trades are not always taught in these schools, instruction in the underlying principles of some of the mechanic arts is a prominent part of the work of each. Each aims at greater efficiency among our tradesmen, and each finds its chief reason for existence in the needs and purposes of the industrial world. The chief differences among these schools are of a technical nature, designed primarily to meet the needs of special communities or particular classes of students. From an educational standpoint there are no great differences as a rule, unless they are found in the practical purposes of the different schools. The courses of study are not only similar; they also approximate very closely the regular work of the more strictly academic schools.

The industrial school looks broadly out upon the agricultural, manufacturing, and commercial pursuits and aims to prepare directly for them. The trade school is a substitute for the old apprentice system and usually offers a short and direct preparation for some specific trades, sometimes omitting all academic branches of study. From the cultural viewpoint of education, the trade school as a possible part of the public-school system is the least desirable of the four schools mentioned above. The industrial school stands next to the trade school. Both, as a rule, take a narrower utilitarian view of education than the manual-training and technological schools. Some exceptions may be found, such as the combined Lick and Wilmerding Schools of San Francisco where a thoro academic high-school course, as well as a fair technical training, are prerequisites for the subsequent two-year trade-school course. These two combined schools illustrate the highest conception of secondary

trade-school work in America. Some of the so-called industrial schools of the South are exceptions also. The Louisiana Industrial Institute at Ruston and the Texas College of Industrial Arts for Women are at once technological, industrial, and trade schools judiciously combined with complete modern academic courses of study.

Industrial and trade schools are sometimes semi-factories, selling their products to defray expenses. Indeed these schools are sometimes run in conjunction with factories, thus limiting the pupils' opportunities for a liberal education or even a broad industrial training. The factory school has caused the name industrial to lose the high esteem to which it is justly entitled.

It is due to the factory schools and truant schools that the name industrial does not convey the correct notion of the high-class work done in some of our schools and colleges. If the word "arts" were annexed, making the name read "industrial arts," there would be a clearer understanding of the manual training and technological work as conducted in the best industrial schools.

We are in need of an inclusive expression to stand for the whole scheme of handwork as conducted in our kindergartens, elementary schools, high schools, and colleges. There is a strong sentiment in favor of adopting the expression "industrial arts." The special courses of the agricultural college may be consistently scheduled as work in the industrial arts, and thus we may have a satisfactory inclusive expression. The terms "manual training" and "industrial training" have been used so long in so many different capacities that they would probably prove misleading. "Manual training" would be satisfactory for elementary and high schools, but the term has seldom been used in connection with college work.

"Manual training" stands for two generally accepted ideas: (1) tool work for boys, such as joinery, woodturning, and forging; and (2) the whole scheme of mechanic arts, including also all lines of handwork in the elementary school, and household arts, design, and ceramics in the high school for girls.

It is evident that "industrial arts" is a more inclusive term than "manual training," and expresses more clearly than "industrial" or "manual training" the work done in institutions giving technological or agricultural courses. Manual-training and technological schools are nearly similar in purpose and content; the schools of technology usually begin their work during or subsequent to the manual-training high-school course.

During the last ten years the scope of manual training has broadened beyond the manipulation of wood and iron, until at present it includes a knowledge of, and power over, a greater variety of materials, such as cotton, cereals, straw, clay, fruits, cardboard, reeds, metals, and leather. In its initial stages manual training as a school subject was concerned with the problems of a limited number of constructions; its theories were based upon the idea that sheltering structures protect man in his civilized conditions, and thus make possible our modern attainments and culture; it omitted two more essential needs of mankind—food and clothing.

When manual-training schools began to broaden their work so as to include the fundamental principles of all industries, it became evident that the procuring and preparation of food and the processes of making clothing were as important from the standpoint of education as constructions for shelter and transportation. Moreover, the study of foods and clothing, when carried beyond mere theory, naturally led to manual-training courses for girls.

The manual-training movement is an educational movement. In a broad sense it includes the sum-total of all forms of educational handwork that may be taught in connection with school work. Manual training may be defined as "any line of handwork which is a necessary factor in the acquisition of hand skill or knowledge. If the purpose of handwork is not an educational purpose it becomes merely manual labor or purely play or empty gymnastics.

Over a decade ago this Manual-Training Department of the National Education Association defined manual training as "the transforming of materials by working with tools according to principles fundamental in the industrial arts." Does not this definition omit many of the essential features of the great manual-training movement of today which is planning to make every phase of school work a part of the pupil's life work?

In the kindergarten and primary grades manual training has a broader significance than could be possible thru the use of tradesmen's tools alone. Especially in the primary school and to a great extent in grammar grades manual training is as much a method as it is a subject. By means of manual-training processes and methods we find the theories of Froebel, the teachings of Comenius, the principles of Locke, and the methods of Agassiz controlling very largely the methods and work of primary education.

The great majority of manual-training schools are high schools preparing for entrance to some university or technological school. There are, however, a few exceptions, such as the Horace Mann School of New York City, the University School of Chicago, the Manual-Training School of New Orleans, and here and there a few public schools which offer manual training in every grade of the elementary course and continue it thru the high school. This is an ideal plan, in fact it is the only plan giving manual training a full opportunity to show its worth in an educational way. The best educational results of manual training from the standpoint of the teaching profession are obtained in the kindergarten and primary grades. As the pupils advance to the high school all studies become differentiated and more highly specialized, and manual training becomes more technical, vocational, and specific.

Industrial, trade, and technological schools are established for the purpose of developing tradesmen of superior technical skill. The manual-training high schools aim to accomplish the same ends and much more; they have ever stood for a broad, liberal, and progressive education, but have never underestimated the practical and intrinsic value of the so-called cultural subjects. The manual-training school aims to accomplish the double pur-

pose of training for immediate life work, and at the same time to prepare its pupils for the university in case they wish to continue their institutional education. Comparison shows that a much larger ratio of pupils from manual-training schools enter the universities than from industrial and trade schools.

It appears that trade schools and manual-training schools are at present quite different in purpose: the former look for immediate results and minimize the value of a cultural education; while the manual-training schools aim to give a superior cultural education by adding experience and practice to the theories of the classroom.

There is a growing need for more intelligent tradesmen and farmers, and the time is coming soon when strictly vocational work of the industrial and trade schools will be offered as electives in many of our best high schools. In the past the cultural theories of education caused all manual-training advocates cautiously to avoid any direct vocational work. With our new ideals of serviceableness and efficiency, and with a renewed and more sensible spirit of democracy, we may expect in the near future ample provision in some of our high schools for strictly trade-school work.

FROM THE STANDPOINT OF ECONOMIC AND MANUFACTURING INTERESTS, SHOULD SPECIAL TRADE SCHOOLS BE ESTABLISHED?

J. C. MONAGHAN, SECRETARY, NATIONAL SOCIETY FOR PROMOTION OF INDUSTRIAL EDUCATION, NEW YORK, N. Y.

Bismarck said, "The nation that has the schools has the future." He had Germany in his mind. His hopes ran high in those days. He had seen the schoolmasters help the empire to its success. He had seen their work before Schleswig-Holstein, Sadowa, and Sedan. No doubt was in his heart or mind. But it does not follow, because Bismarck said it or believed it, that it is true. The nation that has the schools, plus the raw materials, needed in the industries *should*—note that I do not say *shall*—have the future. We have the materials. Our mines, forests, and farms are marvelously productive. With these, the future, or a large part of it, ought to be ours. The census of 1900 said we gave the world 22 per cent. of its wheat, 30 per cent. of its gold, 32 per cent. of its coal, silver 33 per cent., manufactures 34 per cent., iron 35 per cent., cattle 36 per cent., steel 38 per cent., petroleum 50 per cent., copper 54 per cent., cotton 75 per cent., and corn 84 per cent. The things in which we lead, the world wants. They are the basis of all that is biggest and best in economic life. Adding education of the kind called for by Bismarck's remark—industrial, industrial-art, commercial and technical schools—and we win. If the adopt and adapt that led Germany to be adept are introduced here, we will tell an industrial and economic story never told before. If to the three R's the three A's and three H's—training of head and

hand and heart—are added, we will win, for it is the proper training of these that is needed.

The need of the nation now as it emerges from the shell into which it crawled when it put up the walls of protection, the need of today, as we enter upon an era of industrial and economic expansion, is men and women trained as the skilled labor of Europe has been trained. We cannot go far relying upon what is ours now. We must build up a better class of trained help. That this is so the manufacturers are well aware. For a long time manufacturers were able to fill the places of their employees, depleted by death, by other laborers imported from Europe. The machines bought by our people in England and other countries, but particularly in England, were followed by men and women familiar with these machines. Just what brought the working-men and working-women is not a question, now. It may have been the higher wages; it may have been the spirit of adventure. I believe it was both. But they came. To protect ourselves from foreign products, directly, and only indirectly from foreign labor, we erected the tariff barriers. That these were not all their friends would have us believe is evidenced by the fact that the ships laden with foreign products that paid enormous duties came in crowded with laborers, upon whose coming there was no restraint. A time came when the tide of immigration from England turned. The help wanted for the machines had to be sought somewhere else. The Scotch and Irish came, then the French Canadian, then the inhabitants of southern Europe. At last we learned to manufacture in masses. True we were not, we are not, equal to England and other European countries in the manufacture of certain high-class goods, but in many machine-made goods, of the coarser kinds, we began to lead. We began to look for openings in foreign fields. It was then that we began to realize the weak point in our armor. When Hamilton started us on a career of industrial development, of which manufactures were to be a big part, he never dreamed that we would rest satisfied with European workmen. He dreamed of a day when dependence would pass. That day is to dawn, if it is not here.

If a lesson is needed, there are many recorded. In 1876, Germany, among others, was at our Centennial Exposition. At its close, her representative, Rouleaux, wrote to Berlin, "Our exhibits are cheap and nasty"—*Schlecht und Billig*. The Germans did not get angry, nor did they resent or deny the charge. They sent expert or trained agents—mark the kind, trained agents—into France and other countries to find out how it had been possible for France and others to appear with their wonderful exhibits. The result is recorded in the romantic story of Germany's rise to a very high place among the industrial countries of the world. This is not the place to tell that tale, however tempting the opportunity and however well prepared one is to tell it. What must be recorded, however, here, now, for the benefit of our own people, is the fact that a very large part of Germany's, and I might say Japan's, success in the years since 1876 is based upon industrial, industrial-art, and

technical schools. If those empires are winning their way to high places among industrial states, it is because the expert has been developed. To the schoolmaster they have turned to be answered with an ever-widening circle of industrially trained men and women. Again I say Bismarck's famous aphorism, *Wer die Schule hat, hat die Zukunft*—"The nation that has the schools has the future"—is not necessarily true, unless he refers to some far-off future when exhausted mines, wells, forests, etc., will more nearly equalize the resources of the nations. It is no longer possible for our people to put their trust in our industrial resources alone, rich as those are. When an American weaver of carpets turns off a fifteen-by-fifteen-foot product that weighs ten, twenty, or thirty pounds, and sells for fifteen or twenty dollars, while a French weaver on a Gobelin loom turns off a textile fabric of less weight of the same size that is worth thousands of dollars, one begins to realize the important part played by expert labor in a nation's exports, in a nation's products. That we have won our way thus far, here at home, is largely due to the tariffs; that we have won our way some outside is due, no doubt, to our resources. But an hour is on us in which we must make a place for ourselves here and there, at home and abroad, for as high grades of goods as are produced by our rivals. The highly trained efficiency in Germany, for example, is not as old as we are urged to believe. A large part of it goes back no farther than forty or fifty years. Of the nearly \$2,000,000,000 worth of our wares exported annually, no superior handicraft of any kind contributed to success in their sales. They were bought, most of them, because they could not be bought elsewhere. The markets were not found by us. Anyway, our foreign trade is little better than a beginning at best, a mere skirmish. Estimates of our manufactures sold in Europe put them at less per capita than a cent's worth a week; while of those sold in Asia the per capita is so small that it may be neglected. Competition kept out, we went on until invention, by splendid machines and marvelous new processes, has helped us to pile up the products of our mines, forests, farms, and factories, until an outlet is a necessity. Of our \$1,800,000,000 worth of exports, in a single year, 1906, \$1,000,000,000 went from our farms; from our mines, exclusive of oil, \$100,000,000. Of the \$700,000,000 down to manufactures, iron played a large part. This was based largely upon our unrivaled raw materials. Until we know China as well as we know Europe, we will have to stand at the head of the world's iron producers, for we are the world's most wonderful possessors of raw iron, having more than 10,000,000,000 tons—more, according to Mr. Carnegie, than a Swedish geologist gives to the entire earth. This superiority will soon pass, for our inventions are soon copied abroad, or employed under royalties. As Mr. Frank Vanderlip says, "We have, then, gained markets because we have cheap raw materials, because of American inventive ingenuity, and because of the great scale upon which we have done things, but never have we gained an important market because we could do a piece of work better than our competitors could do it. Never have we sold

an important consignment because superior handicraft entered into its production." One might ask why we should not admit all this and still be satisfied. We command the foreign markets. We sell vast totals. We compete successfully. Granted that our success in competition does not rest on a basis of manual skill, our totals in the international trade balances are no less impressive. Such easy logic may be satisfactory for yesterday and today, but tomorrow it may be shattered. Every advantage which we have had in our competition for world-markets, except the advantage of cheap raw material, may be copied by our competitors. Indeed such advantages are sometimes more than copies, they are improved upon. Surely it is not well that we should rest our claims for international trade supremacy solely upon an abundance of raw material when an end to that advantage is within an easy calculable distance.

While we have been producing most excellent executive and administrative officers, skillful engineers, the rank and file have been neglected; the mechanics, workers of all kinds, in all kinds of metals, carpenters, masons, blacksmiths, plumbers, etc., have had no training such as is given to the members of such callings in European countries. Indeed, Mr. Roosevelt, after saying practically what I have just said, adds these words, "Indeed, too often our schools train away from the shop and the forge; and this fact, together with the abandonment of the old apprentice system, has resulted in such an absence of facilities for providing trained journeymen that, in many of our trades, most of the recruits among the workmen are foreigners." Mr. Roosevelt might have gone farther and said that for a long time, even up to date, our highly trained, expert workmen were foreigners. New England's dyers, bleachers, designers, weavers, spinners, fancy workers in jewelry shops were foreigners. Surely this means that there must be some systematic method provided for training young men in the trades, and that this must be co-ordinated with the public-school system. No industrial school can turn out a finished journeyman; but it can furnish the material out of which a finished journeyman can be made, just as an engineering school furnishes the training which enables its graduates speedily to become engineers.

We hear a great deal of the need of protecting our workmen from competition with pauper labor. I have very little fear of the competition of pauper labor. The nations with pauper labor are not the formidable industrial competitors of this country. What the American workingman has to fear is the competition of the highly skilled workingman of the countries of greatest industrial efficiency. By the tariff, and by our immigration laws, we can always protect ourselves against the competition of pauper labor here at home; but when we contend for the markets of the world, we can get no protection and we shall then find that our most formidable competitors are the nations in which there is the most highly developed business ability, the most highly developed industrial skill; and these are the qualities which we ourselves develop.

If we are to make as much as may be made of our vast mineral, forest, farm, and factory products, we will have to have just such schools as Mr. Roosevelt had in mind, such schools as have made Germany and Japan, in a way, educational as well as industrial models.

I cannot help thinking that the manufacturers must take the initiative here, as they did to a very large extent in Europe. Nobody knows their needs as they do themselves. Besides, it will take a long time to get the public-school people to move, even after they have become interested. As to a plan I have none to offer. Certain lines have succeeded in Cincinnati. They are the half-and-half lines. The boys are one week in the school, the next week in the shop. In the school they are taught the things that seldom or never come up in the shop, and in the shop they get what it would be hard, generally speaking, to provide in the school. The Cincinnati system has been very successful for Cincinnati. Boys on the half-time indicated have done fully three-fourths as much and far better work, as far as they went, than was done by boys on full term in the technical schools. But whether it would be wise, or even possible, for other cities to do what Cincinnati did, it is hard to say. I would urge a careful study of conditions. Nobody is better prepared for just such study than are manufacturers. The success of the Brown and Sharpe people, the General Electric, under Mr. Alexander's direction, and the various other schools connected with factories, furnish a justification for that kind of a school. I can conceive of conditions mending by means of industrial education till this country takes a place among the world's foremost producers of fine wares. If it is to continue prosperous, it must do this; for the day China's resources are utilized and automatic machinery takes the place of its myriads of men and women's hands, when mills are put in the place of its homes to produce as Manchester and Lancashire are producing, as New England and the New South are producing, only prohibitive tariffs will keep this market for our own manufacturers against China. Before we enter that era, American manufacturers owe it to themselves, to their help, to America, to inaugurate a system of education such as I have been trying to urge. Mr. Halsey, editor of the *American Machinist*, one of the most enlightened leaders in this new field of educational thought, is firmly convinced that no success is in sight, or will be visible for a long time, unless the manufacturers take the initiative. To urge them to do this is part of my purpose. It is part of that purpose, likewise, to urge the industrial-art phase of the problem. Indeed, I have no doubt but that phase is by far the most important phase of the problem.

The way to proceed is simple. Manufacturers might organize and appoint *experts* to study conditions. They ought to see how much money is invested in various industries. These should be studied carefully, with a view to such differentiation as will lead to the largest and speediest possible success. The story of Theodore C. Search's efforts in Philadelphia, the success of Mr. Sivyver and others in Milwaukee, Mr. Ittner's work and success in connection

with the Winona School in Indianapolis, the work of Senator Stout and Dr. Harvey at Menomonie, and the work in the Williamsburg and other schools of Philadelphia are all fascinating tales of what manufacturers have done, and give good augury of what is possible.

In conclusion, I cannot resist the temptation to break a lance with those who tell us what wonderful work has been done here without vocational education. Some say we have surpassed Germany. They argue from our success that such schools are not needed. How greatly they are mistaken I may not be able to make them understand. This I must say, however, that it is not what Germany or anybody else is with such schools, but what they would be without them. Not what we are without them, but what we would be able to do with them. Germany, without them, would never have won her way to the high place she now occupies in the industrial world. When we run over her record, noting her failure at Philadelphia, and her subsequent successes at Chicago, at Paris, at St. Louis and all parts of the world, and we remember that 75 per cent. of this success, at least, is due to her industrial, industrial-art, and technical-training schools, we cannot help urging our manufacturers to inaugurate a similar system; but before doing so, to send out experts for the purpose of studying the methods that have made Germany, Japan, and other countries so successful. The system of apprenticeship is gone or is fast going; industrial and industrial-art education must take its place. The manufacturer who does not see this has not been keeping pace with the industrial and educational movements of mankind. The harder we work now the quicker will be the returns. The educational leaders of our land have shown a willingness to work hand-in-hand with the manufacturers. The governments—state and national—show more or less interest. It remains only for the manufacturers to co-operate. The German manufacturer, conscious of what that system of education has done for him and his country, is ready to support it entirely should the government withdraw its aid.

In this connection, permit me to quote. The *London Times*, in 1903, said: "The Germans have a particular need for carefully trained skill for the work, because they are not naturally inventive or gifted with the innate sense of elegance possessed by the French. Consequently, the manufacturers give liberal support to the textile schools, and further encourage them by giving employment to the graduates. There is no doubt that it pays them. A manufacturer was showing me one day in Elberfeld a length of dress material. 'That is going to England and is made of English material. I get the materials from England, manufacture them, and send them back. I pay the carriage both ways, and yet I can sell this in the English market.' 'How?' 'Well, you see, this is a nice design; there is brains in it.'" It is just this lesson that American manufacturers have to learn. Not that some have not learned it, for some have, notably men like Theodore C. Search, long president of the National Association of American Manufacturers. His work in aid of just

such education is one of the romances of industrial education. After getting \$35,000 with which to begin an industrial school, when acting as the agent of a group of manufacturers who set \$50,000 as the minimum upon which to begin, he gave back the money and began on his own hook, in his own way, without a dollar from anybody, and laid the foundations for one of the best textile schools on earth. The story will be found in full in number nine of the *Bulletins of the National Society for the Promotion of Industrial Education*. I would urge its careful perusal by all interested in this line of work.

Reports of our own and other consuls teem with praise of such a system of education as is exemplified by the success of Japan and Germany. Surely it is time to investigate.

The speaker is not unaware of the splendid work done by the boot-and-shoe men of America. Familiar with the facts of our industrial life in the large, he looks beyond the machines, to the men, women, and children. Even in the boot-and-shoe industry there isn't much to boast about—when the workers are under consideration. Nor has the speaker lost sight of the silk-workers of Paterson, N. J., and Manchester, Conn. What has been done in these places only augurs for the better day that is to dawn when once we put forth the energies of our people in intensive instead of extensive farming, in scientific instead of unscientific methods, in the care of our forests, and in adding the kind of education for which we stand to our factories.

Besides building us up economically and industrially, this kind of education is sure to contribute much to the uplifting and upbuilding of our workers. With it running as it is running elsewhere, in this atmosphere charged with progress, prosperity will walk hand-in-hand with education on all our hills and valleys. The miner, the man in the forest, on the farm, and in the factory, will be a better man. With these we will lift the help, in all our industries, from the positions of working-men and working-women to one in which they will be men and women at work they love. By means of it the man in the mine, made familiar with what the mines mean to mankind, to manufacturers, to commerce, will be lifted from his clod-like life into a larger realm, one measured by larger thought. When he has the historic perspective pointed out to him, is told what iron and coal meant to England and others in the great fight for first place among industrial and commercial nations, he will feel that he, too, is part of the world's great working force. When the coal miner learns all that, and learns also that the world still leans largely on him for cheap heat, light, and power, he will be better for it all. We, too, will be better for it as a people; and the mine owner will be best off of all. Every word that is applicable to the mine owner is applicable to and true of the manufacturer. When the smelter or wire-drawer goes to the mine for his ore and learns of the large laws that were in the life of the world long ago, and then thinks that under the ocean the copper wires he made are now carrying messages, or runs his eyes along the wires that carry heat, light, and power to our homes and shops, sees what these all mean for progress and prosperity, for all that is

best and highest in the thing called civilization, his life will be larger and better. Out of it all will come a new revelation of man's powers and destiny—an entirely different appreciation of existence. We owe it to ourselves, as a people, more than we do to the men in the mines and mills, to see such a system successfully inaugurated and generously supported. It is not a dream; or, if it is, it is like those often recorded in the Good Book—a dream that we are able to realize to make true.

DISCUSSION

CLIFFORD B. CONNELLEY, dean of school for apprentices and journeymen, Carnegie Technical School, Pittsburg, Pa.—Little by little, sometimes as slowly as the grinding of the mills of the gods, industrial education is assuming its place in the public-school system, until today, instead of educator battling with educator on the advisability of industrial training, such work is taken as a matter of necessity; in fact, in the most progressive educational communities of the country, the former opponent and friend of the plan meet each other in a unanimity of opinion that not so many years ago seemed impossible. With this steady growth of the industrial-training idea and its constantly increasing adoption by our school boards, the subject has broadened in its scope until it has assumed many phases and conditions, just as every new, but substantial, movement must; for it is the evolution of any plan toward perfection that marks its wholesome growth. So with industrial training, we are today not combating the idea in itself, but are rather standing on a more liberal platform, and are discussing the subject in its own complexities and divisions.

We have assumed that our public schools are expected to offer vocational training, and we are now confronted with the question of whether trade courses should be given in manual-training schools or in special trade schools. In order that all sides may be heard, the subject has been considered from the educational, agricultural, economic, and manufacturing standpoints; and in our general discussion today it might be well to follow this precedent and discuss the subject on a similar plan.

The segregation of manual training and trade training is clearly defined on the educational side, and each has its particular place here.

Manual training is not intended to fit the student for any definite occupation, but rather to offer the development of those capacities which purely academic training cannot supply. The keen eye, the skillful hand, the practical mind—these are the desired results of manual training. Manual training likewise has its place in the cultural development of the student, for it broadens his sympathies and interests, his ideas of the beautiful and the useful, quickens his perceptions of exactness and balance, and assists in bringing his education to that point where he may meet conditions and decide quickly on what is to be done in each particular case; for manual training does nothing if it does not tend to encourage resourcefulness and self-reliance. However, while all this is true of manual training, yet neither any factor of this training nor the training as a whole can be expected to fit the student for a life's vocation, any more than the academic training of the public school could prepare the pupil for a professional career. In both the academic and industrial field, the work of the public school must be supplemented by a specialized training along the particular line of work which the student intends to make his future calling, and in the industrial system this supplementary school must be the trade school. Here only can the student obtain that special and thoro equipment which will enable him to go forth as a man trained in his vocation and prepared to take his place in the field of industrialism. What the professional school or university is to the prospective lawyer or physician, the trade school is to the future mechanic; and just as the student who enters the professional school is supposed to have a broad foundation along academic lines before entering the

university course, so the one who is admitted to the trade school ought to be well trained in the principles underlying all industrial work. This preliminary training may well be offered in the manual-training schools, so that these schools, in addition to providing part of the necessary education for the children of today, will also serve to offer that elementary knowledge and practice which must be part of the equipment of students entering the trade schools. It might be argued from this that manual-training schools could therefore offer both the preliminary and special training—the latter in the addition of trade-school departments—but it must be obvious to any observant educator that such an attempt would be a very considerable and likewise burdensome undertaking on the part of the manual-training schools, and that both departments—that is, the manual-training and the trade divisions—must suffer in the system, for there could be no concentration of energy in either one, and the line of differentiation would not be very clearly marked. Then, too, there would be the danger of failing to make the student realize the vast importance of the special trade courses as contrasted with the general plan of the manual-training department, for the student of today is so constituted that he does not begin to feel the responsibility of his career until he has begun to specialize in that particular work which he is to make his life's calling. On the other hand, by offering vocational training in the trade schools only, the sphere of demarcation is clearly defined, and the student soon understands the value of his trade training. The fact that the trade schools are only such, and not institutions of general learning, must also be a potent reason why these trade schools may so concentrate their plans as to offer the student the benefit of vast opportunities in his special branch. It, therefore, seems clear to me that the only place in our educational system in which to offer trade courses is in special trade schools.

On the agricultural side, the line of differentiation is not so clearly defined, for the general training in mechanical methods as given in the manual-training schools offers much of the rudimentary knowledge of the character that is required in agricultural pursuits. However, in the production of agricultural implements, the skilled worker of the trade school is a vital necessity and the skilled blacksmith or the thoro mechanic should be given a much more specific training in his work than the manual-training schools can offer. This special equipment must come from the trade schools, for in them alone can the student receive the benefit of experienced and well-balanced mechanical instruction.

The economic and manufacturing interests of the country clearly demand the establishment of special trade schools for the training of their workmen. The day of experiments in the economic field has passed so far as workmen are concerned, for the growth of competition and invention, and the almost miraculous pace set in the industrial world today, have long since eliminated the employment of any but the most skilled and accurate workers. The progressive manufacturer can no longer afford to offer apprenticeship courses in his plant as liberally as he did in former times, and the youth who leaves school with only a manual-training education as given in the public school is in a sad plight when he attempts to obtain satisfactory employment. The demand for high-class men is so acute today that if we would train our students to the point where they may compete in the fields of skilled labor, we must give them the advantage of special trade-school courses. Here, perhaps more forcibly than in any other case, the line of demarcation must be drawn, for the present-day manufacturer has no time for the student who is "Jack of all trades." Here, too, must the student be made to realize most strongly that the days of schoolboy pranks and immature methods are at an end, and that the period of responsibility has come. The complete separation of manual-training and trade schools can alone bring this condition about in a satisfactory way. Here, also, is the need for special training most felt, for that student alone can take his proper place in the manufacturing world who has been trained and drilled in his particular line of work. The trade schools are intended for this purpose and therefore offer courses accordingly, so that the manufacturer of the present and the future must of necessity look to the special trade school for his skilled labor.

The Carnegie Technical Schools, in their trade courses, offer the theoretical knowledge

and practical skill required in these days of specialization. Young men desiring to enter industrial work are assisted to select a congenial trade and are given practical instruction not only in that trade but in the closely allied subjects. A broader knowledge can thus be secured than is possible under the prevailing system of apprenticeship, which fails to give general instruction to the beginner. Older men already engaged in a chosen trade can secure there such additional information in subjects related to that trade, and such up-to-date practice also, as will increase their efficiency and hence their earning power. The foundation is laid for habits of observation, initiative, and thoroughness; the student is assisted in acquiring a general knowledge of the industrial conditions in America; and special emphasis is placed on the fact that besides the possession of mere skill it is essential for a man to concern himself with right living and good citizenship in order to be permanently successful.

The necessity of special trade schools must now be patent to all of us, whether from the educational, agricultural, or manufacturing standpoint. I do not think that any one of us would advocate the abolition of professional schools or universities, nor would we support a plan to combine the academic and professional school. So, likewise, we should be found on the side of those who advocate the separation of manual-training and trade schools. Neither one of these schools must attempt to usurp the field of the other, and while there may and should be a harmonious relation existing between the two, yet each has its distinct province which it alone must occupy. It was Herbert Spencer who said that "Industrialism must not be confounded with industriousness," and we today might say that special trade training must not be confounded with manual training. Each has its relative place as affects the other, just as industriousness affects industrialism; but the fact still remains that they are distinct institutions and should be maintained as such.

MRS. IDA HOOD CLARK, director of elementary training, public schools, Milwaukee, Wis.—In considering this subject of vocational training in the elementary schools, we must look the present situation squarely in the face, and see that it is true that the system in vogue in our elementary schools does not meet the needs of all the children. The great masses are in the grades, and the majority are in the first six grades. All the pupils cannot enter the high school, and the number of pupils whom the schools lose at the end of the elementary-school course is appalling. The pupils go out of the elementary school, many of them, wholly unfitted to earn a comfortable living, and entirely unprepared to take a place in the world's race for an honest livelihood. We must profit by Germany's example and provide for these wage-earners.

I had the honor and great pleasure of being one of the members of the European teachers' trip, taken under the auspices of the American Civic Association. I was sent abroad to inspect elementary, manual-training, and trade schools for girls. While inspecting schools in Germany, I became very much impressed with Germany's system of continuation schools. The pupils who are obliged to leave the elementary school at about the age of fourteen to go to work are given training in these continuation schools, which are in session in the evening, and often on Sundays. Employers are obliged to arrange the hours of work so employees can attend these schools, so the schools thereby keep possession of the boys and girls up to the age of seventeen.

The continuation schools may be trade continuation schools, or they may include instruction of an academic nature. They are for those who feel the need for more training. Attendance at these schools is compulsory. I believe we could well profit by Germany's example and establish continuation trade schools in America, and raise the school age to sixteen or seventeen years. We ought also to put more industrial or real manual-training work into the elementary schools, and give more time and money to it, using this work as a means of expression in the elementary grades. It will thus lead to vocational training of some kind in the grammar grades. It is the elementary-school curriculum that needs to be vitalized and pruned and made interesting, so that the boys and

girls will want to stay in the higher grades, and eventually we may hope to keep more of them in the secondary schools.

We need all kinds of schools to take care of all kinds of children. Industrial education—call it by what name you will—must include rational, related handwork from the kindergarten thru the elementary schools to help the children to find and to express themselves. It must include vocational and trade training at the end of the elementary school for those who must go to work. It must also include manual training in every high school, and technical schools to train directors and real craftsmen, as well as other technical institutions of higher learning. The trade schools for both boys and girls must be a part of the public-school system and have a definite plan in the educational scheme, which ought to give every American child an equal chance to make the most of himself in the industrial, as well as in the intellectual, life of the country.

In Milwaukee we have a trade school for boys that has belonged to the public-school system for three years. In September next we shall establish a similar school for girls. We are the first city in the United States to establish trade schools in connection with the public-school system.

ART AS RELATED TO THE INDUSTRIES

I. FROM STANDPOINT OF ART

ARTHUR B. CLARK, ASSOCIATE PROFESSOR OF GRAPHIC ARTS, LELAND STANFORD JUNIOR UNIVERSITY, STANFORD UNIVERSITY, CAL.

A readjustment is taking place in education because vocational training is making insistent demands. The program of this Association bristles with the topic. The conservative wall has been broken and an opportunity is offered to place instruction in the manual arts on a sound basis. What place shall art have?

Art is the element which sweetens the performance of labor and gives spiritual expression to its product. By its use a workman can give an object a value beyond itself. Writing of this peculiar power of art Browning says:

So may you paint your picture, twice show truth,
Beyond mere imagery on the wall—
So, note by note, bring music from your mind,
Deeper than ever e'en Beethoven divined—
So write a book shall mean beyond the facts,
Suffice the eye and save the soul beside.

This is true of all labor. Inspired by art a workman can dig a ditch, make a roadway, or build a gatepost so that each, in its degree, shall mean beyond the facts and save the soul of the workman from paralysis of unenlightened toil.

The world is built under artistic law and we are fitted to perceive it. Whether we look at a bank of sand shifting with the wind, at an alluvial valley washed by a stream, at a tall tree, or a tiny flower, we will see, if our sense is alert to see, that beauty of arrangement in series and rhythms of curving lines and harmony of colors is the universal law. Sometimes Nature seems to grope, as in the formation of the mountain range; again she attains a tri-

umphant climax as in the bursting melody of a lark, or the unfolding blossom of the iris; but always the striving for beauty is there.

The manual worker should create in the same manner, assembling all that he touches by artistic law. That is the path of peace and harmony. Mr. Frederick Oakes Sylvester has written of these laws as follows:

Art is a living spiritual interpretation of creation, uplifting humanity by its nature, its activity, and its fruitage. It has its laws of being, of unfolding, of demonstration, expressed thru unity, harmony, rhythm, symmetry, balance, strength, grace, and variety. The permeating presence, recognition, and understanding of these laws in human thought and their embodiment in material form constitute the whole realm of the esthetic.

Imagine for a moment a community of human beings producing this pulsating order in all its life; moving to music, expressing in song, celebrating events of civic and national importance with orderly exercises in which emotion is controlled, unified, and expressed by concerted rhythmic action. Pleasure would increase and life take on the noble exaltation of the most perfect operas. In material surroundings, the first effect would be to destroy some bad furniture and houses because they would not fit orderly lives. Good articles would be retained because worth retaining. This condition of life, imaginary to an extent, is not wholly so, for this development is now going on, and the buildings, furniture, and music which do not meet artistic as well as useful standards are being eliminated. By looking back ten, one hundred, or five hundred years, we see that the buildings which people preserve, the pictures and carvings which are protected in museums, are those which have artistic merit. The greatest artist is he who creates those things which people will care to preserve for the longest time. The best craftsman is he who so makes a dish, a table, a leaded window, or a house that it will not soon be cast aside to make room for another article of higher spiritual significance and better design made by a workman more observant of the laws of beauty.

What workman does not prefer to perform enduring and ennobling work, or who will make articles of bad proportion if he knows a better; or, on the other hand, what man making articles of exquisite beauty will be satisfied to make them flimsy and perishable in joinery?

Good taste in design, in choice of material, in proportioning spaces, in coloring and carving can so impress one's spiritual joy in an object that it will last ten times as long and hence be ten times as valuable. Art is a profitable partner in any craft. This effect is not economic alone. The unenlightened workman is a drudging slave, waiting for the release of five o'clock; while the artist striving for perfection is a god, making a universe, and for him time does not exist.

Thoreau tells of the artist of Kouroo who, disposed to strive for perfection, set about making a staff, and altho while the task was proceeding

"his friends deserted him and grew old in their works and died, he grew older by not a moment." . . . Dynasties passed as he worked at his simple task, but "When the finish ing stroke was put to his work, it suddenly expanded before the eyes of the astonished

workman-artist into the fairest of all creations of Brahma. He had made a new system in making a staff, a world with full and fair proportions . . . and for him and his work, the former lapse of time had been an illusion, and no more time had elapsed than is required for a single scintillation from the brain of Brahma to fall on and inflame the tinder of a mortal brain."

Such is the inspiration and reward of artistic work.

The speaker is an architect, when not teaching, and has for years noted the state of mind of various workmen in the building trades. While all occupations afford more or less of opportunity for the exercise of artistic pleasure, the workmen who appreciate the main motive of a design or who feel any large relationships between the various details of a structure are rarely found. This state is due partly to defective education of the individual workman, partly to the defective education of those who determine building conditions, partly to the spoils system or organization in industry by which a few attempt to shave a profit from more workmen than they can furnish with inspiring jobs. In the average, among the manufacturing industries the power of individual initiative and appreciation is less than in the building trades.

The journeyman acts upon the recipes and precedents of his trade and is embarrassed outside of them. The artist, when confronted by new conditions, is stimulated. He analyzes the problem, arrives at an approximate solution by deduction, corrects it by experiment, and follows his taste with confidence. I recently saw a most beautiful result in staining redwood, obtained in this way, which the local painters would never have produced.

Planing mills are useful in furnishing dressed lumber, but evil in effect upon the men who do not know when to look elsewhere. I recently saw a man in distress because he could not cut a fancy end on a large beam with the band saw. Ten minutes' work with a handsaw did the work, after an hour had been spent trying to make the machine do it, and even then the man felt that the handsawed product was a makeshift.

Among the improvements in ideal production the three following are notable:

In England an ideal industrial village has been established under the leadership of Mr. C. R. Ashbee. The principles and works of William Morris inspire the movement. Mr. Ashbee may be known to many here thru his lectures in this country. He holds that sanity in work demands that the individual must come into direct contact with his material—no machine between to destroy the impression of the human being with his sensitive soul. Cabinets, metal work, jewelry, and books bound and printed are produced here in a most ideal way. Craft song and art in many forms are used to enlighten life. The movement succeeds in giving a considerable number of people an exalted industrial existence, but it is too much in advance of the times for widespread imitation.

In connection with the art department of Tulane University, some pottery work and embroidery are produced, both under the finest conditions of work-

manship and of highest excellence. Each piece of work is individual in design and reflects and reveals the beauty of Louisiana, as felt and seen by the artist making the work.

The work done under the direction of Mr. Gustave Stickley, in the well-known "Craftsman" shops, is more commercial in character than the work in the two places just mentioned. The shops are conducted much as other factories are, but the sanity of design in its adaptability to the material and genuineness of construction makes this work notable.

Countless amateur and professional handicraft societies and individual workers, in almost every city, are doing some work in an enlightened artistic spirit. Anyone who feels the impulse to reform manufacturing conditions in his locality can begin the reform by making with his own hands at least one article—a chair, a lamp shade, or a window stencil—with the spirit of completest artistic expression.

A woman of my acquaintance recently made an embroidered wall hanging symbolizing a particular spring day's drive upon a mountain. The foothills dotted with flowers, the mountain covered with redwood forest, and the zig-zagging roadway were symbolized with charming simplicity and taste.

How shall teaching in the manual arts be carried on so as to advance enlightened workmanship?

First: The manual worker and teacher must be an artist; the artist must be a manual worker, and there is no short cut to either. Art is not a kind of surface varnish which may be rubbed over a thing after it is made, but it lies as well in the bones of the object. The manual-training teacher cannot be told a few principles in a few words which will make him an artistic designer. He must study principles and observe their application in old and modern work; he must use graphic means for study and recording observations; he must become an artist by doing what the artist does—then and then only can he enter the art world and understand. Visual sensitiveness to appearances, to textures smooth and rough, to colors dull or bright, to proportions, variety, and individuality of form—this is the test of the artist. This-sensitiveness is a growth which may be cultivated, but which cannot be obtained by recipe.

Second: Workers must be trained to think—a thing which schools are lax in. They more often train pupils to move only with the crowd; which requires them not to think. In enlightened work thought must precede action; the image of the finished product must be as clear and complete as possible. A working drawing is the first experiment in making. The completed product is a test and demonstration of the first mental design. The habit of drawing things before they are made induces the habit of exact thinking and should be insisted upon for that reason. Thoro, exact thinking is the hardest of all tasks to form as an habitual practice. To produce the intellectual habit in work is the emphatic task of the manual-arts teacher.

In teaching artistic design methods have been greatly advanced during the past dozen years, an advance in which Professor Arthur Dow and Dr.

Denman Ross have performed notable service. The system of teaching at present generally followed includes some preparatory exercises in space division by simple lines and the development of surface pattern, followed by planning and actual making in definite material. Instead of an uninspired and lazy adaptation of details of historic ornament from classic sources, historic examples, including Romantic and barbaric art, are used for qualitative inspiration as demonstrating principles, while motives for ornament are taken from such sources in nature as have personal significance. Art should always have imaginative significance—express a great emotion—else it is only an empty husk, as most art which we see is.

The new method cultivates the habit of insight into the artistic principle involved, wherever it may be found, individuality in its use, and if possible an appeal to the higher poetic imagination. The embroidery above referred to, commemorating the mountain drive, was complete in this sense of appealing to the higher imagination, and has a value for its maker far beyond its form. It also has an artistic form and expression which makes it far more effective as a keepsake than any mere "relic" of the drive, in the shape of a bunch of faded flowers tied with a ribbon and inscribed with a date would be. It is from such beginnings that the completest art grows. We wish not the Gobelin tapestries but American tapestries symbolizing in their art the high ideals of democracy, and the joy of life everywhere.

The present demand for more emphasis on vocational training should not result in less training for culture; but rather, in such choice of illustrative examples of culture, with such clear insight into it as a definite reality that it can be applied and realized in one's trade.

Society can with propriety expect two things from school-trained men and women: first, vocational or trade efficiency, including broad knowledge of the best ideals of some trade and enthusiasm for them; second, character which makes for good citizenship, ability to use well a daily margin of time in making a good home, in using the best literature, and parks, theaters, art galleries, etc. Society expects, in short, efficiency in a trade and balanced culture in the art of living.

When we realize how much our material surroundings mean to us, and how significant a measure of our civilization is the impress of the human soul which we place upon them, or do not impress upon them, be it in range from the pattern on a Navajo blanket to the wall painting of a Puvis de Chavannes, it seems that one-fourth of everyone's school time might well be spent in acquiring refined ideals of the industrial arts, while intending art workers might spend more than half of their early school time in this study.

In conclusion: The enlightened industrial arts worker and designer needs to become saturated with beauty in nature, absorbing it with pencil and brush; he needs to study principles of expression and adaptation as exemplified in the choicest art treasures preserved to us; he needs to develop power in exact mental creation of original problems, with ability to hold all the complicated

elements of material, of use, of beauty, and of appropriate decoration liquefied in his mind, until they gradually crystallize into unified form; and he needs continually to perform with his best endeavor, making each successive product better than the last.

The recipes of a trade, a catalog of its raw materials, are useful, and schools should provide samples of them in their museums: wood stains, dyed cottons, mural work, plaster textures, etc.; but more important is the implanting of high ideals, leading the coming workman to consecrate himself, each in his trade, to the producing of masterpieces of craftsmanship. Phidias with his Parthenon, Michael Angelo with his "David," Stradivarius with his violins—these are among the tallest trees of the forest. But there was a forest. Where the greatest artists thrived thousands of lesser workmen also did their best and lived in the joy of creating. We can cultivate the forest.

The order in civilization in which many men are mere machines fails in the ends of civilization; we do not want it. We want men to incorporate their minds and souls into their labor, to be artists.

Manual-training teachers, the greatest opportunity is yours. The greatest need of America, you, and you only, can supply.

II. ART FROM STANDPOINT OF MANUAL TRAINING

MISS EDNAH A. RICH, PRINCIPAL OF STATE NORMAL SCHOOL OF MANUAL ARTS
AND HOME ECONOMICS, SANTA BARBARA, CAL.

"Every man is a consumer and ought to be a producer. He fails to make his place good in the world unless he not only pays his debts, but also adds something to the commonwealth" (Emerson).

Manual training, having a definite purpose, is expected by the educational world to help the child to make his place good in the world at large, and "art as related to the industries" should give that additional something which makes him a factor in the commonwealth—the something which Jane Addams means when she asks art and manual-training teachers to "develop influences that will bring to the army of wage-earners something of the true social consciousness, something of joy and satisfaction in their work, something of stimulation toward a large, intellectual life."

The subject is inexhaustible, especially if one allows reminiscences, criticizes present conditions, or grows prophetic; therefore this paper will be from the standpoint of the special teacher who is training the rank and file of small boys and girls before they know the meaning of vocational, industrial, trade, or technical school, with the thought of choosing their life-work.

There is one solace. No one can know all there is to know and this fact will help us to be forbearing, and to try to find a meeting ground. Art and manual training should each help the other that the industries may be strengthened and improved thru the intellectual growth and appreciation of the people. We do not want the industries to get the upper hand and take away all the joy

of childhood and youth. These young people who will be both producers and consumers in one decade or generation are entitled to freedom of outlook for a little time.

We are all special teachers and yet each would doubtless give quite a different definition or explanation of the three terms, "art," "manual training," and "the industries," if discussing the question. The principles of art as defined by Denman Ross—"balance, rhythm, and harmony"—belong quite as truly to manual training, and surely these are the adjustments necessary in the industries.

"One ideal of life should be an absorbing interest in one's work, and a consciousness of its value and social relation, not a desire for money with which to make unmeaning purchases" (Addams). Manual training, respecting the rights of childhood, helps to realize this ideal, and thus aids in adjusting the demands of living during the school days when we can impress them that "Men do not attain perfection by striving to do something out of the common. Perfection is acquired by doing the common things uncommonly well."

"There is work that is work and work that is play, and in one of these lies happiness." To bring understanding and happiness is the province of the school that teaches art and manual training as one, and such schools give to the industrial world a human product that will not be waste.

The art classifications are many, but the sense of refinement and beauty which is associated with the term gives a foundation on which to build.

Manual training in the acceptance of the term in its present meaning—general training rather than vocational—has a tangible place in the minds of all special teachers, but who can know of all the industries and their specific needs?

Industries demand skill, highly specialized skill, which often comes from repetition of the same operation. Remember we are dealing with children at a period when accuracy of manipulation or fine muscular control are not the dominant qualities of our pupils. "On the other hand we are reminded that it is a period of great sensitiveness of feeling, of much self-assertiveness, of great interest in the doings of the real world, and of eagerness to participate in the achievements of this world" (C. R. Richards).

Here we realize that art and manual training have their greatest value in quickening and broadening the outlook for the industrial workers, and for the "other half" who become in time consumers and keep the standard high thru their appreciation and understanding of industry.

The problem is broad, varied, and interesting to every manual-training teacher, because with all the generalizing, the special problems of the community must be met. In Southern California there are no factories, and we think of trades, agricultural occupations, and commercial positions for our workers; yet the relation of art to the industries is just as vital a theme as in the crowded centers. Nature is so wonderful in California that minds are

awake to beauty, and people demand simplicity and harmony in the industrial products which come to them. Life in California is not bound by traditions and people know little of the province of manufacture, and yet thru art and manual training they must be trained to an appreciation of construction and the power to judge of quality.

Directness, simplicity, and honesty of purpose form the basis of the relationship of art and manual training, and the grounds on which to build individual judgment. When novelty, which seldom means genius, absence of that proportion which characterizes noble art, and exaggeration which means unrest, are eliminated from homes thru the art and manual-training instruction, the industries will have their being on quite a different plane. The history of the development of art and manual training in the schools has shown the greatest change in the attitude of our teaching, owing largely to the interpretation of the industries, and what is today pronounced impossible may be a reality in a few months or years. The present need is for trained teachers who can select from the great amount of material, and organize their work so that in the short time available they can present the study of industries that are fundamental because they represent the material foundation of civilization.

Art as related to industries from the standpoint of manual training is closely correlated with design. Design is dependent upon proper relation of lines and areas. When construction is to be considered there is a limitation imposed by material, by the skill of the worker, his environment, his interest, his purpose; "Good designs are invariably sane, regular, orderly, consistent thruout." A piece of work well done brings to the craftsman and to the beholder alike a sense of satisfaction, and it is this factor that must influence the industries when the people's appreciation of what is *good* demands this production.

Manual training is concerned with technique, but it should be more practical than technical in its educational aim. Originality in design is a gift; but design in a practical sense is part memory, part judgment, part ingenuity and only part invention, and it implies an equipment of knowledge and taste (Lewis Day).

It is not necessary, then, that every craftsman shall be a designer nor that every designer shall have that skill which gives the product an ethical and a commercial value; but it is necessary, in order to obtain highest efficiency, that the teacher must have a knowledge and appreciation of the possibilities and limitations of both phases of work.

The industries are for young men and young women practiced in design, able in workmanship, adapted to the conditions and the necessities of industrial production. The industrial world wants buyers and sellers who appreciate conditions of manufacture. Our public schools are for all the children, who are all to be citizens with standards to enable them to pay their debt to the commonwealth. Design has so many modes of expression and opens so many avenues for both boys and girls. All the avenues lead to happiness in the hands of the skillful teachers of manual training or of art. There is the basketry industry, the weaving in the southern mountains, as well as in New

England and in New Mexico; pottery in many centers; drawn work; embossed or carved leather; bookbinding; illuminating; etching; engraving; printing; photography; enameling; jewelry, and metal-work in brass and copper. All these can be accomplished in girls' work in domestic art which also includes the many necessary and decorative things that may be done with the needle. And we must here include home economics with all the opportunities of the house for application of design. There are countless uses for the trained workers with edged tools: in wood; in the woolen mill or cotton mill; in the shoe factory; in the manufacture of paper; in the steel and iron industries, and the building trades. The list is too long. When the question is summed up do we not find that the province of art is so united with that of manual training that they cannot be considered as separate subjects; that they should be best presented in a way calculated to fit the boys and girls to become self-reliant men and women because they understand and appreciate the industries?

There is no one royal highway. The manual-training teacher must give time for preparation, then adapt his knowledge to the questions in his community, give willing service and be on the alert to keep abreast of the times. He may keep in mind certain salient points which will give his work standing whether the town in which he works has a population of five thousand or fifty thousand. Always choosing the simple straightforward way will leave no room for crude uncertainties, which bear evidence that hand and mind were not working together. Teaching "that beauty is based on sound construction," and that harmony comes thru the proper relation of parts, one to the other, the child may grow up to believe Emerson when he says: "Though we search the world over to find the beautiful we must carry it with us or we find it not."

Manual training apparently does not consider the machine; but this is a false premise, for man finds machinery the great factor in modern civilization. He should be taught that he is to reckon with the great force and above all that he must be the master of machinery, not its slave. He must know that machines can repeat a good pattern as readily as a poor one, and if he has learned his lesson aright he will have no difficulty in choosing.

All proper education is the opening-up of a necessary and beneficent life-occupation, the exercise of such a calling that furnishes the best and largest means for efficiency, service, happiness; and to go back to Emerson's words, "allows every man to pay his debt to the commonwealth as a producer and a consumer."

III. FROM GENERAL EDUCATIONAL STANDPOINT

ARTHUR HENRY CHAMBERLAIN, PASADENA, CAL.

Two years ago at the Los Angeles meeting of the National Education Association, your present speaker presented a paper before the Department of Art Education on "Art from the Utilitarian Standpoint." In this address the attempt was made to point out that the truly utilitarian or useful is, in the

last analysis, the truly artistic. The speaker endeavored to indicate that any object embodying the real elements of art is at once a useful object. This does not mean that in a narrow sense all objects of utilitarian value are artistic. Far from it. It means rather that all essentially artistic objects must be so, not in spite of, but on account of, their value as expressed in terms of use.

Industries and art have for so long been separated, the one from the other, that little attention has been given the relation that should exist between the two. "Art for art's sake," upon the one hand; industry for strictly commercial purposes upon the other—these have been the conceptions commonly held for many decades. It is years since an artistic commercialism has dared present itself for consideration.

You will, owing to the important business to come before you at the close of this session, and because of the food for thought and discussion contained in the two admirable addresses to which you have just listened, be pleased if at this time I limit myself to a brief consideration of the general phases of the topic, "Art as Related to Industry."

One July morning when a boy I stood, shortly after sunrise, upon a bridge that, spanning a river in one of the largest cities on this continent, was swinging lengthwise of the river to allow for the passage of a three-masted schooner. A country boy, this was my first view of the great city and of this waterway that, like a mammoth ribbon, divided the city on either hand. As I looked, delighted and amazed, there appeared upon the river crafts from many countries and of many descriptions then unknown to me. Tied at the docks on either side were barges of coal and lumber, unloading their cargoes, these to be in turn distributed thruout the length and breadth of the great city; or, perhaps, again loaded upon cars to be shipped in every direction—the coal to warm the homes of thousands and to keep alive the furnaces upon which manufactures and material progress depend; the lumber to be turned into dwellings and the thousand-and-one projects of the arts of peace and war.

Other boats were taking on their cargoes of raw material and manufactured goods to find port in every civilized portion of the world. Sailing craft, lake- and ocean-going steamships, small sculls and row boats, tenders, government cutters, boats large and small, old and new, were passing back and forth in a ceaseless, uneasy movement. And this coming and going, loading and unloading—this activity, life, motion, was ever before the eye telling to those who could read of prosperity and of poverty, of joy and of sorrow, of pleasure and of pain, of gain and of loss; telling of a commercial life meaningful and necessary that was being made to serve the life of man.

But, standing there on this July morning, the commercial significance of the scene had no hold upon me. The life, the movement, the white sails, the bright, painted hulls, the slender, tapering masts, the ease with which the immense floating structures slipped past one another on this narrow waterway—all was to my mind the embodiment of art itself. It was only a beautiful panorama, a play enacted for my pleasure. To later years of discrimina-

tion it was left for me to realize that another meaning attached to this picture upon the canvas of life, and that bound up with the scene that had appealed to the eye was a commercial meaning, a business interpretation, an industrial significance that could not and should not be dissociated from the former. It was an industrial art, an artistic commercialism.

In generations past, before the power of the dollar had begun to assert itself in such definite and far-reaching terms as is the case today; when time was less of the vital element it is at present, and before division of labor had been carried to its apparently extreme limit, but a limit that is constantly expanding as a rubber band may be stretched, there was a day when art and industry were blended and shaped together in the work of the people. At the base of utility were beauty and stability. The builder in wood was the artistic builder and his product was to endure, not for a day, but for time. The mason kept in mind both his building and its beauty. The worker in iron constructed on lines not only of strength, but of satisfaction. The architect, the mechanic, the artist, were often one and the same. There was a unity, a oneness, thruout the work, and that which today could not reach completion was not outraged by hasty or careless workmanship. The worth of the structure was to be determined by the test of time, the relation of function to fitness, and the effect produced upon the eye and mind. To meet this test, thought and intelligence, care and patience, honest and artistic work, beautiful ideals and strong realities, in fact the very lives and purposes of men, were built into the structure as builders lay stones one upon the other.

And so whether in the cathedral, the shop door, the road, the wall, the piece of furniture, the picture, the implement, the book, the fireplace, the silver for the table—each building, each separate piece, decoration, or utensil, was made to use, to beautify, and to endure.

Today all is different, altho the tide has set again toward the better conception. Division of labor and specialization are now so far-reaching that ten, twenty, sixty men divide among them the processes formerly carried on by one or two. A workman knows little and frequently cares less about details of processes outside his own narrow field. He is a human machine, working automatically, his business to turn out the largest amount of work in the shortest possible time. He need have no care for artistic merit or pleasing quality. Development in the world of science is so rapid today, and new and improved methods in the arts and industries so soon displace former practices, that stability is given less consideration than would otherwise be the case. True art cannot exist apart from stability.

The whole argument being presented is that our day and generation have developed such tremendous industrial and commercial problems, such lines of special interest, that art and industry have become almost hopelessly divorced; and while these lines of progress are to be welcomed and accepted, a right and happy adjustment of the pleasing and the profitable must somehow be brought about. The time has come to cease considering "art for art's sake." The

day is passed, if this country is to develop ideals and live up to them, when a basis for governmental policies, moral life, and educational growth is to be found in a sordid commercialism. Art and industry must work hand in hand. The artistic workman must take his place side by side with the technical workman; the artistic and technical elements must be developed in every man who plans and builds. A pleasing unity of art and industry, of beauty and utility, and all making for stability is the end toward which we should strive.

The American way is the quick way, the machine way. Quantity counts and character, whether reckoned in terms of man's worth or artistic merit, is too little thought of. I have observed the hundreds of girls and boys in one of the large factories of an eastern city as they carried on the various processes of lead-pencil making. Each had his own part to perform and the hands moved so rapidly as to tax one in following as it would to follow the fortunes of a moving picture. On observing a similar group of young people in a large pen factory in the English city of Manchester, the contrast between the American and the English temperaments was clearly disclosed. The movements of the latter were studied, deliberate, with time enough and to spare. On the one hand was an exposition of the "simple life," with thought and physical growth possible; on the other the expenditure of nervous energy such as produces invalids in adolescence.

Now modern methods or scientific processes in the industries do not always imply a turning from the artistic and soul-satisfying. But as we emphasize the value of quantity in production, as we make for today rather than for tomorrow, as we of the schools educate one class to the value of technique and another to the beauty of line and tone and harmonious blending of parts, we tend to cut the cords that should bind industry to art. We make of art a thing of and by itself—at which point true art ceases—and emphasize an industry designed simply to make existence possible, trade brisk, and money more to be desired than before.

But how impossible to expect a happy combination of the beautiful and the useful until the schoolmasters themselves appreciate its significance and work for its culmination. At this present Convention, and now, while is being discussed the advisability of cementing more closely the two departments of Art Education and of Manual Training, there are still many of our best schoolmen who fail to grasp the full meaning of the movement. They cannot understand that there is a logical connection between construction and decoration, and are still willing that art in schools should be taught without application and that manual training should consist in making of objects from one or another material, apart from any refining influence of construction or decoration.

Manual-training courses as such must soon cease, and courses in drawing as generally taught shall ere long be of the past. Real forms of industrial training must supplant these out-worn courses, and applied art and design

come in as substitutes for the present usages. Then the artistic and the industrial are to be taught as portions of one subject; and the work will be real instead of seeming, and will satisfy where now it offends.

A real education implies an education for all—an individual education, in whatever it may consist, for the individual man. A real art must appeal to all and to accomplish this must be bound up with the industries, in which all are more or less intimately interested. Day by day, hour by hour, this appeal must be made, as it is constant dropping that wears the stone. With the elements of beauty and of utility combined, with workmen trained to glorify industry thru pleasing form and to magnify beauty thru industrial processes and splendid technique, with the dawning of this day of better things will dawn also the day when labor shall be dignified, and the master and the workmen shall be fellow-builders, working toward the same goal in the same school of service.

THE IMPORTANCE OF INSTRUCTION IN ARTS AND SCIENCES FOR HOME LIFE

CREE T. WORK, PRESIDENT OF COLLEGE OF INDUSTRIAL ARTS,
DENTON, TEX.

I understand that the chief purpose of the chairman of this meeting in proposing the topic under discussion was not for the special consideration of the importance and influence of the commercialized industrial arts and sciences, but rather to emphasize the importance of such instruction as will tend to exert an uplifting and broadening influence on the home life of our people, in both country and city. I take it that at this hour it is deemed especially fitting and important that we look to the future, toward the better training of the children, both girls and boys, for the business of home-making, and that we are to take into special consideration those arts and sciences, the teaching of which in the public schools is practicable, and which have direct bearing on the problems of the home and the home life.

It is natural in the evolutionary process thru which public education is passing that there should be a clear recognition of the domestic idea, that our schools should establish courses in domestic arts and sciences as well as in applied art, and that the whole scope of physical and biological science should be scanned for the purpose of bringing to bear on the home-making and home-supporting question those features which are of daily importance to all concerned. Not only this, but it requires no stretch of the imagination to see also that ethics, civics, history, and the whole line of so-called economics bear a very direct and vital relationship to the proper training of those who are to direct the forces of the home. As this subject is to be discussed later from the special standpoint of the domestic-science teacher and the domestic-arts teacher, and by the advocate of economic interests generally, I shall leave this phase of it to them, with the further remark that to my mind practically every

formal subject of the present school curriculum may be held to pay tribute to this, the most vital of all studies—the upbuilding and preservation of the home.

I desire to present briefly four propositions:

First: Industrial arts and sciences as related to the home should be generally taught in the public schools, first for the benefit of the pupils, and second, for the further benefit of the entire community. A prime object in education is to assist the educated to the fullest all-around life. What is the object of life from the human point of view, or in other words, what do we live for? Is it simply to be rich, but not economical, not comfortable, not helpful, not cheerful, and even perhaps not healthy? Or is it simply to be wise in theory, and yet not industrious, not sensible, not practical? As I understand the aims and ambitions of my fellow-beings, their desire to be rich and to be wise emanates from their conviction that riches and theoretical wisdom will bring the other blessings enumerated. The extent to which this will prove true depends upon the provision that we may make for giving instruction that will predispose and habituate our children to right habits in life.

We profess to believe that we are educating our children to produce, or to increase, in them, social efficiency. This is good doctrine; but we need to remember that social efficiency includes vocational efficiency, which demands manual skill, a good store of sense-information, and the ability to comprehend and heed the demands of environment. We owe it to both sexes to give such training as will emancipate them from the narrow limitations placed upon the home by tradition and the lack of practical training in the past, and to extend their opportunities for making better homes, including the enlarging of their own intellectual and social possibilities as individuals, and as free, intelligent citizens with ability to contribute a good share toward the well-being of the community.

Women have the right to enter upon independent wage-earning occupations outside of the home, and it is commendable that trade and vocational schools for girls as well as for boys are being opened in our denser centers of population. However, there is danger of making too broad the pathway leading from the home and of obscuring the chief practical department of woman's endeavor. There is a point beyond which competition between the sexes may prove a positive detriment to the home life. There is many a home where both parents are engaged as wage-earners, in which the actual amount saved for the rainy day is not so great as it would be if the wife and mother had been properly trained to a comprehension and application of those economic principles that ought to be demonstrated in a well-conducted home, and an understanding of which would place her in a position to add much more to the income—to say nothing of the comforts of the home and the welfare of the children—than can possibly result from the combined wage of both parents. If the wife's energies and time are diverted from their rational and legitimate channel, extra burdens are thrown upon the husband, which, even without the item of competition, tend to make him less efficient, and the fundamental

thing at stake—the welfare of the individual characters in the home—is forgotten.

There is a stage in the life of many young women when for the time being it may be both necessary and desirable that they have an independent occupation. This fact it is that makes the problem a complex one. It seems to me that the solution of the difficulty must lie in the organization of such courses of instruction of a vocational nature as will give a combined preparation for independent wage-earning and for home-building and home-keeping in the broadest sense, including intellectual, social, and practical features. At present many young women go outside of the home environment to seek the activity and social life of which they feel the need. It is this that leads the young woman to stand behind the counter at four dollars a week, wearing out her nervous energy and unfitting herself at a rapid rate for the duties of home-keeper and motherhood, rather than accept partnership in the fifteen dollars earned by a worthy young man who would gladly give up the lion's share of his earnings to have the joys and comforts of a home. The young woman would also enjoy a home, but shrinks from its responsibilities because, unfortunately, it is to her an unstudied problem and she prefers to do the thing which requires little study, or for which the traditional school training has best fitted her. The problem of making fifty or sixty dollars a month (the average wage of the great majority is less than fifty dollars) properly build and support a comfortable home needs to be solved, and its solution depends largely upon the women. It is the lack of study of home problems by girls that has turned the connubial bliss of multitudes to bitterness, and wrecked the beginnings of many a home ere the honeymoon has passed. Our cities are filled with miserable women, heartsick men, and blighted homes, due to the lack of instruction for girls in the grammar grades and high schools in the fundamentals of home economics. Whatever may be the temporary ambition of the girls in our elementary and secondary schools as to an independent existence after leaving school, both history and reason forbid that we should ignore the eventual demand that will be laid upon these same girls. It is obligatory upon us to do all things possible while the girls are in the school to get them ready for the duties of womanhood.

To the end that work especially suited for girls may find its way into the curriculum, we must give more attention to what Sachs calls the "analysis of girl nature," and we must expect that the type of mind developed thru the work of our school system will cease to be largely of the classical turn, and will become more and more common-sense, practical, human. The term "culture" is an ever-changing name for the ideal results of the process we call education, and the so-called cultural studies are being correlated with social subjects, and gradually is social education coming to be esteemed the most cultural. The open way for the development and broadening of a young mind is not always the same way, or the way pointed to by the gaunt finger of tradition. Intelligent industry or thoughtfully directed hand-work

opens the door for culture to many minds. Inspiration may come thru a glimpse of the activities of life in well-organized operation, and growth and development often result from the full-daylight view of humanity in action, as that view is obtained thru contact with, and participation in, actualities. The case of the practical father and his son taking the same course at the same time in the University of Missouri, with the father entering lower than the son and graduating in the same length of time and with a higher standing, illustrates the clarifying influence and the cumulative force of experience and actual work as prime factors in education.

Second: The industrial arts and sciences in the schools should be presented for the pupils in simple, concrete form—not disconnectedly, but in correlation with other matter of the curriculum—and also by public lectures and demonstrations for the adult members of the community. We must teach not merely for the purpose of directing the outgoing energy of children, larger and smaller, but also for the purpose of releasing pent-up energy. The energy of many children dies for lack of an outlet, or, like the fragrance of the wild rose, is wasted on the desert air of riot-running pleasure or ill-devised pastimes of other sorts, because the schools provide no plan for its concentration and purposeful direction. Under present conditions it may actually be more profitable, on the whole, for many of the children to discontinue their school work before reaching the high school, because, by dropping out they find in the world about them the training that we have failed to provide in the school.

To illustrate the correlation of the various subjects of the curriculum, I may cite our Texas school for girls,¹ where an attempt has been made to base the course of instruction on practical-life interests of women. The physiology and hygiene is taught by a woman physician, who also gives instruction in home nursing and care of the sick; the work in chemistry and physics draws on the home for its problems; drawing finds its application in home decoration, in designing for the work in millinery and dressmaking, in the planning of houses and furniture, etc.; the cooking is closely related to portions of the dairy work, to botany, to zoölogy, to chemistry, to physical culture, and to physiology and hygiene. Likewise the history, composition, and literature have a close relationship to one another in the study of industry and the home, and each in turn involves a consideration of the various industrial features of the school. The mathematics, manual training, bookkeeping, and domestic economy are constantly aiding one another and furnishing rich material for the work in political economy and civics. Except for the change from one laboratory to another and the ever-present printed titles on the textbooks, the student would frequently lose sight of the fact that the work, which to her is a continuous problem of life interests, is in many schools regarded as so many distinct and unrelated subjects.

That the work of the school cited is practical is shown by the fact that the

¹ The College of Industrial Arts, Denton, Tex.

girls are constantly putting it to use, even while they are in school. After leaving school one takes charge of the house and puts new life into the home; another, whose grandmother is taken with pneumonia while on a journey, takes the aged woman to a hotel, calls a physician, and serves as the only nurse, her intelligent care of the patient causing the physician to send his own daughter to the school the next year; another serves the home village as postmistress; another, who has come eighty miles across the West Texas plains to reach the nearest railroad station, goes back to her home from the school inspired, to return the next fall bringing two sisters; the three buy a sewing machine and by making their own clothing at school save enough to pay for the machine, which they take back with them to their prairie home; another student takes up the work of teaching others the home arts; another teaches a country school and at odd hours instructs the children and the mothers of the neighborhood in the arts and crafts for women; another pays her school expenses by making and selling baskets; another, who comes six hundred and fifty miles to reach the school, completes her course and returns to establish a modest, attractive, happy home of her own in her distant city. These are but examples of what a recently established school of secondary grade is doing.

More must be done to bring practical education within the reach of our women. Equipment and teachers for such work can be provided within the means of almost every school district. The extension and neighborhood lecture and demonstration system should be more largely adopted, both for the help that it brings to the parents and for the reflex effect such work will have upon the school.

Third: The industrial arts and sciences especially adapted to the business of home-making should be taught in all the grades of the school, the several phases of the work being taken up at such points in the school course as will be most suitable, considering the ages, stage of development, and environment of the pupils. Too long have we failed to take into consideration the individual interest and ambition of the pupil and her personal aims that are of worth. We have failed to encourage a plunging of the personality into work vital to nature and to life's most worthy accomplishments. Yet all of these tendencies of children are means that are worth utilizing to accomplish our end.

The lack of vital issues in the curriculum has characterized the rural schools as well as the city schools, and the rural homes and city homes alike have been lost sight of in our attempts to conform to the demands of psychological theories rather than sociological needs. I have known, and some of you have known men whose houses—mark you, I do not say homes—are outward models of beauty, but whose children are without libraries; whose barns are examples of convenience for live stock, while the living-rooms of their families are better arranged for the same purpose than for human souls; whose bins are filled with grain for the market, while the stock in their wives'

lards is too scant for human comfort; who glean their fields most thoroly, while about their houses there is waste enough to support several families; who (thanks to the training they have had at the agricultural college) also know about contagious disease in live stock, blight in the orchard, and the boll weevil in the cotton, and who spare no study, effort, or expense to avert or exterminate these enemies, while at the same time they and their households are daily subjected to worse evils by unscientific cooking and unsanitary housekeeping, which produce indigestion, nourish malaria, invite typhoid, and throw their estates liable to the expense of premature funerals.

Not only should girls know the how of the art of housekeeping fully as well as their mothers, but they should know the why a good deal better. When a celebrated painter was asked with what he mixed his paints, he replied, "With brains, sir." Our aim should be to get more brains into all household affairs. Homekeeping and household duties are often talked of as drudgery. If they are so, it is probably because they do not contain enough of the intellectual quality. Any work not intelligently performed very soon becomes drudgery.

Cooking is both a fine art and a science. Those who are to be intelligent in this capacity, whether they are to practice the art or to direct a household, should know the organism of the human body, how it is nourished, how different elements enter into and affect the operations of its organs, the chemistry and classification of foods, how they grow and how they are prepared, how they are affected by heat and moisture, and by the different methods of cooking. They should know about fats and oils, starches and sugars, acids and stimulants, mold and yeast, bacteriology, sterilization, sanitation, and hygiene. They should know how to cook for the sick and for the well, for the child and for the adult, for the active and for the sedentary, for the brawn worker and for the brain worker. Those who are to conduct the domestic-science department of a household should be provided with a completely equipped kitchen, and trained in the details of conducting it. They should know how to set the table and serve the meal in the best manner, because the serving of the meal has quite as direct bearing on its value as has the cooking. Along with these qualifications woman must have the intellectual training and culture which makes her truly mistress of the manse—able to entertain, as well as to direct and manage the affairs of the household.

Since the family is to be clothed as well as fed, it is highly important that the young women of our day be trained thoroly in the art of needlework. Financial ability to employ a seamstress does not entirely remove the necessity for, nor invalidate the general advantages of, a practical study of such hand-work by every young woman. She should also be familiar with all modern equipment for this class of work; with the quality and variety of fabrics used in dressmaking, and with the mode of their manufacture; with the principles of designing and the aesthetics of dress. She should also be able to advise intelligently the male members of the household as to their attire, and to give

it such proper attention as becomes her position. She needs to know the science as well as the art of laundering. A knowledge of millinery is valuable to any woman, and a course in this art may well be added to other accomplishments. The proper furnishing and decorating of the house are matters that naturally fall within woman's sphere. She needs to be intelligent about house furnishings as to quality, shapes, design, quantity, and arrangement. She should be able to select the best according to her means; to choose suitable carpets, paper, and wall decorations; to give the best effect with limited material; to make the home an attractive place. All this requires a correct sense of beauty, a trained eye, and deft touch. We need to make better and larger provision for such training in our schools. Commercial methods and processes of manufacture should be studied. The instruction should include visits to factories, exhibits, and distributing centers.

Those who are blessed with rural homes should be familiar with the industries incident to their position. The dairy, the poultry yard, the apiary, the vegetable garden, the flower garden, and the orchard all bring with them a multitude of problems, of which the progressive housewife as well as the husband, and the girls as well as the boys, should be students. The instruction offered by schools in all of these subjects should include a consideration of the financial problems of the home, a systematic study of household economics, and a system of household accounts. It also involves a study of domestic history, including the history of the home and of the science and art of house-keeping, from the earliest times to the present.

The training of our girls in these practical lines does not mean that they are to be slaves to manual labor or that they are primarily to substitute their skill for that of commercial workers. It means, primarily, that they will have such a practical and comprehensive view of skill, and art, and science, and industry, as to make intelligent use of commercial products, to discriminate in the selection of such materials as contribute best to the home life, and to take an active and effective interest as responsible citizens in the supervision and control of the industrial arts and sciences as they apply to the home. Their freedom from drudgery and overwork must depend largely upon their practical comprehension of their work. It is in this way that woman's realm is enlarged and her intellectual and social opportunities increased.

There are many items now included in advanced courses of instruction in home economics that may, by a careful process of correlation, be fitted into the elementary-school curriculum. Why should we wait until girls have passed into the high school to teach them certain fundamental truths regarding physiology and hygiene, chemistry, physics, sanitation, plant and animal life, and other matters that prove of keen interest to younger children and that are better comprehended by them than many of their elders seem to appreciate? Such instruction may be logically reviewed and added to by formal lessons in home economics in the secondary schools. The variety of subjects that may be included in such a course, involving domestic science and domestic art,

with their great diversity of correlated work in science and fine art, afford a large field for careful study and systematic presentation by those who would enrich our school curriculum and save to the school children their right to gain a larger amount of practical preparation for life's duties.

Fourth: The proper conditions for instruction in industrial arts and sciences for girls, as well as for boys, must be provided. Among these conditions should be included properly trained teachers, plans for instruction that is especially adapted to local environment, and suitable texts and equipment for the work. Most teachers continue to teach that which they learned in the long ago, and are slow to acquire and fit into their work material that is not included in the textbook outlines or that cannot be reduced to printed form. It is in this manifest lack of preparation and adaptation on the part of teachers that the normal schools of the country have before them a great opportunity, and, to my mind, a heavy responsibility. There are still many of the normal schools that are not offering courses in domestic science and domestic art. The greatest hindrance to the development of these lines of work thru the efforts of the normal schools has been due to their inadequate equipment, and the fact that apparently they have not realized the necessity of requiring their students to take sufficient time for preparing themselves to teach the industrial arts and sciences. With properly trained teachers, there will naturally follow plans for instruction, the correlation of the new work with subjects already established, and the reorganization of the school schedule to admit of such instruction.

One hindrance to the more rapid introduction of the industrial arts and sciences, particularly in our secondary schools, is due to the comparative indifference, and in some cases the antagonism, of the colleges and universities, which still assume to claim that the chief function of high schools should be to prepare students for their courses. Is it not time that we consider more seriously the question as to whether or not we are to continue erecting high schools primarily as preparatory institutions for certain colleges to which a very small percentage of our children will ever go, or whether we are to attempt to popularize and vitalize the high school by encouraging the establishment of such courses as will meet the needs of the larger number? I believe in the classical schools and in classic education, but against the theory of their many virtues stand out a few of the concrete facts of our existence which are not taken into consideration by many of the institutions inherited from our forefathers. It is a popular theory that if the mountain will not go to Mahomet, Mahomet must needs go to the mountain. In the exigencies and legitimate demands of public education, it is here in order to ask the question as to what constitutes the mountain in this case. We are beginning to realize, altho but in a small degree as yet, the tremendous possibilities of secondary education and the vastness of its field.

There are certain fundamental principles underlying the home that should control in the home life, whether in the city or in rural districts. The indi-

vidual problems arising are vastly different, it is true, and for this reason I have made a plea for the adaptation of the instruction in industrial arts and sciences to local conditions. The rural arts must find their emphasis and most direct application in the rural schools. Naturally, the problems of the garden, the dairy, and the like, will be dealt with at greater length and in more concrete manner in the rural schools than can be provided for in the city schools. When the question arises as to the feasibility of specialized or departmental work in the rural schools, we find a partial answer at least in the reasonable and now popular plan of providing rural high schools, the number of which, and the scope of work offered in which, must necessarily be determined by the density of population, the money available for such schools, and the popular recognition of the needs in the case. Those who are to lead the discussion of the two well-organized features of industrial arts and sciences for women will, I am sure, have valuable suggestions as to practical arrangements for teaching home economics in the rural schools particularly.

If the propositions laid down in this paper are reasonable, we who are directly in the work of industrial education have before us a vast field requiring development. We must enlist the friendly attention and the best efforts of teachers in all lines of school work, as well as the co-operation of our citizens. We must do our part in adapting the work we have in hand to the solution of the problems of the home. If we believe in extending the beneficent influence of industrial education to the homes and firesides of our land, let us show our faith by our works.

INFLUENCE OF INDUSTRIAL ARTS AND SCIENCES UPON RURAL AND CITY HOME LIFE

(A) *FROM THE STANDPOINT OF DOMESTIC SCIENCE*

MRS. ELLEN H. RICHARDS, INSTRUCTOR IN MASSACHUSETTS INSTITUTE OF
TECHNOLOGY, BOSTON, MASS.

The old order of things has passed away: that we must first acknowledge. The old home industries have been taken away and no new ones have been put in their places.

The trouble with the home-maker is that she does not know what is the matter; she is disgusted, but she has never put two and two together—cause and effect.

Man tried to be kind—we must do him that justice—when he took away the interesting work of the spinning-wheel days and put in modern methods: plumbing, air-tight stoves, well-fitting windows; ready-to-eat breakfast foods and canned foods to take the place of home cooking; carpet sweepers and wringing machines to save heavy exercise. He was bountiful in his gifts, but did not provide means for gaining knowledge of how to use these new ideas. But in his own workshop or factory, he did not stop at installing machinery. He studied methods and devised plans until the methods of the American

business world and the management of American industries stand at the very front, brought there by study and by using the lessons of experience to form a definite science of business methods.

Do you ask what this has to do with domestic science in relation to the influence of industrial arts and sciences upon rural and city home life? Everything.

Today, household labor is flat, stale, and unprofitable, and the remedy offered is to give it up and let the hotel keeper manage it. And why do householders turn to him, in spite of the limited comforts of air and space and means for home cheer and hospitality? Because he can run the establishment for them without their noticing any friction, and that is because he governs by scientific industrial principles.

If the influence of the industrial arts is to be a means for progress, we must at once take this cue from the world of industry, and train the coming woman to use the ripe experience man has gained in business for the establishment of her home on as scientific and economic principles as have been used in the factory, on the farm, or in the modern shop.

The home cannot be maintained without labor. How much labor depends upon the perfection of machinery, the elimination of friction, and the intelligence brought to bear. In women must be developed greater flexibility of thought and adaptability of manipulation. They must feel the sense of power over things.

This is the problem of the educational world. We have so long worshiped intellectuality that we feel it must make up for all lack of training. We mournfully confess it does not. The college man who relies on his book is distanced by the day laborer who adds intelligence to his muscle knowledge. The college woman who has missed an early experience in the various duties of the household finds her back and arms will rebel if she is for any reason obliged to use them.

For the sake of future ease and sense of control, each child should have muscle exercise in the necessary motions of housecraft. It is true that machines are being invented, but where do girls learn to know their construction, to learn the use of them or how to control the motor power? There are schools of all sorts of mechanical contrivances for the commercial world, but none for the application of mechanical power in the house.

In the first *Annual Report* of the State Dairy and Food Commissioner of Maine we find the following clear statement:

A laundry provided with stationary wash tubs, with washer and wringer for power use, is an innovation. But why should not the woman of the farm be provided with modern appliances? Why should she be compelled to toil as her great-grandmother did? The farmer no longer reaps with a sickle, or even with a cradle. He rides his plow, and often his harrow. He rides his grain drill and corn planter and corn cultivator. He rides his grain harvester and his corn harvester. He loads hay by machinery and pitches it into the barn by horse power. The time is come when it is positive cruelty to compel, or even allow, the woman to toil on without running water or machine power in the house.

The same stream, water, and sewage system that must be present for the dairy will take care of the laundry. The same power for grinding feed and separating milk and pumping water and sawing wood will turn the washer and the wringer. Prices will vary somewhat, but the following will be a guide to the cost of equipping such a room:

	Dimensions	Horsepower Run	Length of Life	Approximate Cost
Stationary tubs	3 compartments, each 28×25×17 deep		20-30 yrs.	\$30.00
Power washer.....	24×32 inches	$\frac{1}{2}$	10-15 "	55.00
Power wringer.....	18", 24", 3", $\frac{3}{4}$	$\frac{1}{2}$	15-20 "	40.00
Piping and connections.....			10-20 "	5.00
Drying room (steam piping $\frac{3}{4}$)			10-20 "	10.00
Total.....				\$140.00

The investment of \$140 for one year at 7 per cent. equals \$9.80; deterioration, assuming that they will require to be replaced every fifteen years, equals \$9.35 per year, or a total of \$19.15, or say \$20 per year, or 38 cents per week. Add to this 10 cents more for gasoline used by the engine. If the farmer were compelled to kill and dress two hogs every week thruout the year, he would think nothing of spending 50 cents a week for machines which would save so much labor, and enable him to do more work in less time. A power ironer costing about \$60 may be added, if desired. Such a laundry is to be desired also, because it will practically insure clean garments worn by the milkers. A drying room, about 6×12 feet, located between the dairy room and the laundry-room, provided with steam pipes for heating, will cost very little, and will insure quick, clean, and easy drying in any weather. A power laundry like this may be rented to the neighbors for say 50 cents per day, they to come over and do the work. Such an arrangement will in a measure lighten the burden now resting so heavily on the woman of the farm.

There must be another workshop added to your group. What shall it be? The experiment station for the application of industrial arts and sciences to the home.

I have felt all along that the girl needs as much manual training as the boy. The means may be different, but the goal is the same. To quote from a writer in the *Manual Training Magazine*: "It is to train workmen to do better work."

Run over the list quickly in your mind and see how strong a place domestic science has in the industrial arts and sciences. The study of electricity, for instance. I wish I had a room in one of our educational institutions as well equipped with household appliances as the salesroom of a modern electric-light company. Again, it shows how we have been turning to the outside industries for the development of manual training, and we must utilize the same tendency if we mean to cultivate the woman's efficiency in her traditional dèpartment, if she is to continue to control it.

Only the other day a man was given the preference over a splendid woman teacher because he could build a chicken coop! I believe that if poultry and dairying are to be taught in the rural schools, at least the simple elements of carpentry should be taught to the girl also. Here is a statement of sloyd for girls, taken from a western school: "Use and care of tools; practical exercises in sawing, planing, chiseling, filing, boring, spoke-shaving, etc.; constructing useful household articles—fireless cooker."

For the well-being of her family, she should be taught with the boys the construction and management of the plumbing and heating and lighting plants. In a word, she should be taught to know the machinery of the home and how to care for it, as well as the boy who is to be trained as an engineer or for some industrial enterprise knows his plant.

Why does one laundry do the work for thousands of families, when washing day is such a bugbear to one household? Why does the restaurant feed thousands with as little friction, apparently, as one household? Why do the hotels and public places have skilled domestic service, such as many housekeepers are sighing for? Why are some of our office buildings with thousands of feet of space the envy of many in regard to cleanness? Why are the modern cow-stables of the large milk-producers kept so much better than the one little barn? These questions tell us where to look for our answers for many present-day problems.

Yes, perhaps more work must be put back into the home, but it is the work of the brain—a directing mind to plan, to see the interesting side of the household management, to bring out the interest and pursue it; to use every material power, to use this knowledge for the advancement of human labor, and this thru the application of the knowledge at hand.

Organization and systematic classification come thru the handling of tools and having things in their right place. The direct way of doing things and how to save time and strength are learned by gaining control over material things. Then let us apply the principle to the home; for the principle in the workshop or the pantry, in the furnace, the forge, or the stove for the kitchen, is the same. Woman will then choose the household as her profession, not because she sees no other way of supporting herself, not because it is a traditional inheritance; but because she will there find the means to give the best of strength and skill and knowledge for the betterment of mankind.

The time is ripe for this movement. Women have been thinking, and some men have been abetting them. The family, the house, its furnishings, its management, its daily care, its needs in mechanical appliances, its ethical standards, and the share of the income it needs to carry it on successfully under the twentieth-century conditions must be determined. We must prepare the future home-maker by all the light of modern science, and we must fully realize the bearing of mechanical and economic changes upon the material surroundings of the home life. This preparation cannot begin too early, and cannot be too closely interwoven with all school work.

Co-operation in study and publicity in results will quickly transform conditions on the farm, as well as in the heart of the city. The problem of the nation and of the individual are really one—interdependent—each necessary to the other in the development of the home of the rural and the city dweller.

(B) FROM THE STANDPOINT OF ECONOMIC INTERESTS

ALBERT SALISBURY, PRESIDENT OF STATE NORMAL SCHOOL, WHITEWATER, WIS.

I am not sure that I rightly understand what is expected of me in the treatment of the topic assigned me. If I do rightly understand, we have before us the question, What can the teaching of industrial arts and sciences do for the rural and city home of tomorrow? And the question at once arises, What does the American home need to have done for it?

We all accept, I think, without question, the doctrine that our civilization is essentially a civilization of homes, not of harems or caravansaries, but of families, each with its own separate domicile and domestic circle. Whatever, therefore, menaces the home menaces our civilization itself. Whatever exalts and betters the home is of vital importance to the nation. The problems of the home are thus the problems of civilization; but the chief problem of the home is the problem of woman, of her daily employment, and her attitude toward domestic life. If any preponderant or even considerable share of civilized women become imbued with the idea that domestic life is "slow," that marriage is unnecessary or undesirable, then we must recognize that the foundations of our social system are already crumbling.

Let us briefly consider, then, what has been happening to the American home in the last generation. If I try with a few hasty strokes to bring before your minds the home of a generation ago, let it be understood that I am dealing with the rural home, for that was the typical American home of fifty years ago. The country home of our grandparents was a small co-operative factory. There was division of labor within the home, but each home was a unit in itself. The wife and daughters were skilled operatives in many industries, and there was need of many hands, old and young, male and female, to carry on the industries necessary to the subsistence and comfort of the family.

But all this is now a thing of the irrevocable past. The farmer no longer takes his grist to mill, or cures his own meat, or churns his own cream. The home factory no longer spins or weaves or dyes or makes garments. We have passed from the tallow dip to the electric light, from the fireplace and Dutch oven to steam heat and the baker's wagon. The bacteriologist now superintends our dairies, and the mail-order house caters to a multitude of wants which our own hands once supplied, or which did not as yet exist.

Man, today, lives in a different environment, pursues different forms of industry, has different aims and standards, has, in short, a very different consciousness from the man of my boyhood. But the industrial, social, and intellectual life of woman has changed, if possible, even more than that of man. And the transformation already effected portends, no doubt, other changes of serious import in the near future.

In the former days, woman in the home was the partner of man in his struggle for a livelihood and a competence, and not his competitor. Her contribution toward the support of the family and to its accumulations was as

necessary as his and no less strenuous. But the advent of machinery and changes in the forms and organization of industry have taken away from her many of her former occupations and responsibilities. The great shift of population from country to town and the differentiation of the city home in its various types—palatial mansions with a retinue of servants for the wealthy, flats and tenement houses for the multitude—has also profoundly modified the daily life of women.

Largely as a result of the causes thus rapidly hinted at, we have that striking, and to some minds alarming, social and economic movement of the last half-century—the wholesale invasion of the general labor market by woman. She has made a sudden and successful raid on man industrially and has wrested from him a large part of the industrial field. If she had simply taken away a part of his *work*, he might have been resigned to the loss; but, under the laws of supply and demand, she has lowered his wages in the occupations which remain to him below what they would by this time have become but for the new competition. Five million women in these United States are now displacing or competing with men in occupations which women a century ago did not dream of entering. In cotton mills, in tobacco factories, in printing offices, and a hundred other fields of manual labor, millions of women are now harnessing themselves to the yoke of daily-wage labor to the great detriment of home life, and the physical weakening and increased death-rate of such children as are born to them under these conditions.

But an even worse menace to the home is found in the great army of girls and young women pressing into forms of employment less menial, in a sense, but no less dangerous both to physical health and the home-instinct; namely, the nerve-wearing occupations of saleswomen in the great department stores, of typewriters, stenographers, etc., in city offices, whose occupation requires them to dress beyond their means and sets before them hourly the easy lot of those possessing wealth and position with big money to handle and spend.

By reason of the supposed greater gentility of these occupations, young women crowd them inordinately, not only displacing and cheapening men, but competing with each other to the extent of keeping down the compensation to a limit in many cases shamefully low.

Many of these working-women of all types, are, it is true, working from necessity—widows, victims of unfortunate marriages, and daughters of indigent parents, who must do whatever their hands can find to do in order to live at all. But many, if not most, seek employment external to the home from choice and not from compulsion. Not under the necessity of such labor, they feel a greater independence thru the full control of a weekly wage; and here is where much evil takes its beginning. Having no obligation toward the maintenance of a home, they have no scruple about spending their whole income upon themselves, in dress or other unwonted luxuries. Thus new standards of living-expense are formed. New, if not false, ideals of life are adopted, and domestic life becomes more and more an improbability if not an impossibility. This

"industrially independent" young woman will not marry a working-man because the man's income is not adequate to her new standards of living. She herself has helped to diminish it. She is still a candidate for matrimony if she can jump thereby into a class above her own; but the chances are against success in that. And so thousands of bright, young women are working on toward the fast-coming day of nervous breakdown, in semi-public employments, who ought to be suitably settled in the safe harbor of a modest home.

There is, perhaps, no more ominous fact in our social outlook than the growing number of men who remain single—the bachelor guild—shirking the domestic relation, and all the social responsibilities which naturally attach to it, from prudential reasons; or who delay marriage until they are unfitted for home and family life, and supply the place of it by relations which may here be no more than hinted at. And even with those who do marry, home life has no longer the character which the moral health of society demands. Life in hotels and apartments, where "no children need apply" and where true home conditions are impossible, the fast diminishing birth-rate, and the drift away from domestic duties are facts of evil import.

Whatever turns young women away from the ideals of home-making, family life, and the separate home, in which children shall be born and reared, is an evil to her and to society. Whatever deters man from marriage thru his inability or unpreparedness to meet the rising demands of luxury and extravagance, or the unwillingness of the woman of his own class to surrender her income in order to share his, tends to personal immorality and social demoralization. "It is a condition and not a theory which confronts us."

Under the operation of great economic and sociological laws, we witness today this greatest social phenomenon of the age—the invasion by woman of the open labor market, to the imminent danger, as it seems to many, of the home and all that depends thereon. What shall we do about it; what *can* we do? It is not the province of this brief paper even to attempt an answer. If this new condition meant only that woman is henceforth to do her share of economic production and family maintenance in public, so to speak, instead of in the privacy of home, that, while matter for serious consideration and some misgiving, might not be altogether alarming. But we must not overlook the fact that the American home of today no longer affords the domestic training which was so thoroly instilled by the home of a generation ago. And this is especially true in the case of the city home. In the homes of the well-to-do, the girls of the family are banished from the kitchen and practically excluded from all household employment. Even in the homes of the middle class, the "hired girl" has shut out the children from all that wholesome participation in the home economies which would fit them for successful management in homes of their own later on. In the homes of the working-class, the case is quite as bad. The wife who works in the factory thru the working day, and then does the meager services of her meager home, is no better able to train up her daughters in the ways of happy home-keeping than is the German peasant woman

who does a man's work in the fields and keeps her house besides, in the crude fashion of her class. And if it is the daughters who are working in the factory, instead of the mother, the case is little or no better. How shall such a girl in such a home, with all its meagerness, learn even such art as her mother possesses in this direction of rightly ordering a home? And what will ever give her such knowledge of and taste for domestic ways as will save her, if she does marry, from the demoralizing life of hotels and boarding houses? Marriage itself so often becomes a tragedy by reason of this unpreparedness of the wife for its duties and responsibilities.

And now what is the real aim, as related to women, of this industrial education which we are preaching? Is its purpose to fit her for, and so turn her more definitely toward, a form of "industrial independence" which wars against the very existence of the true home? If only that, then let us have none of it. But let us further ask whether it can, and will, be directed so as to exalt the dignity and increase the attractiveness of home life. Can and will it do anything to make women and men more ready to enter upon home life in the sane and simple way in which their own parents and grandparents did, not waiting for all the means of modern luxury? If so, and the truth of this can be made manifest, then there should be no delay and no feebleness in the promulgation of its claims. Whatever tends to make woman man's competitor instead of his complement, whatever tends to make woman less disposed toward the career of a home-maker, is not a safe or fit thing to be taught in the schools of the nation. If "industrial education" is so administered that it tends to produce only swifter and more skillful wage-workers to increase the employer's profit and to compete with men and each other for the employer's dole, then the less of it the better. If that is what trade schools mean, then let us take heed what we are doing in advocating their establishment.

I, for one, believe that much good and no harm can be done by wisely organized courses in home economics in the public schools. I believe, also, in schools which shall train girls in the truly feminine industries—dress-making, millinery, etc.—in the larger cities, at least. But I feel that the trade-school movement, as related to women, should receive careful and critical challenge as to its real aims and its social and economic results, and that the interests of the home and true domestic life should be held of higher consequence than any question of industrial independence or efficiency, important as they undoubtedly are. Sane living is more important than all the things that wages can buy.

DEPARTMENT OF ART EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—FLORENCE E. ELLIS, supervisor of drawing, Public Schools, Cleveland, Ohio.

Vice-President—C. VALENTINE KIRBY, Manual Training High School, Denver, Colo.

Secretary—GERTRUDE R. SMITH, Art Department, Newcomb College, New Orleans, La.

FIRST SESSION.—WEDNESDAY FORENOON, JULY 7, 1909

The department met in joint session with the Department of Manual Training.

(For program see Department of Manual Training.)

SECOND SESSION.—THURSDAY FORENOON, JULY 8, 1909

The department met in the Central Presbyterian Church, and was called to order by the president.

The program was carried out as follows:

President's address: "Better Preparation for the Life-Needs of the Majority Who Do not Reach the High School"—Miss Florence E. Ellis, supervisor of drawing, Public Schools, Cleveland, Ohio.

"Art in the Home" was the subject of a paper by Gertrude R. Smith, of the Art Department, Newcomb College, New Orleans, La.

The discussion was led by W. E. Roberts, supervisor of manual training, Public Schools, Cleveland, Ohio.

Charles M. Carter, supervisor of drawing, Public Schools, Denver, Colo., read a paper on "The International Congress of Art in London."

At the close of the program the president appointed the following Committee on Nominations, to act with the Nominating Committee of the Department of Manual Training:

COMMITTEE ON NOMINATIONS

A. B. Clark, Stanford University, Cal.

William H. Smiley, Denver, Colo.

Gertrude R. Smith, New Orleans, La.

The department then adjourned.

THIRD SESSION.—FRIDAY FORENOON, JULY 9, 1909

The department again met in the Central Presbyterian Church.

The first topic of the morning was a paper by W. H. Elson, superintendent of instruction, Cleveland, Ohio, on the subject, "A High-School Course in Drawing and Applied Arts."

This was discussed by William H. Smiley, principal of East Side High School, Denver, Colo.; Miss Ruth S. Dalziel, art instructor in the North Side High School, Denver, Colo.; and others.

The Report of the Committee on University Entrance Examinations in Art was presented by A. B. Clark, of Leland Stanford University, chairman of that committee.

"The American Federation of Arts" was the subject of a paper given by Henry Read, national delegate to the Art Convention, Washington, D. C.

The department adjourned to meet in business session with the Department of Manual Training. For report of committees on Resolutions and Nominations, and for election of officers, see minutes of that department.

GERTRUDE R. SMITH, *Secretary*

PAPERS AND DISCUSSIONS

BETTER PREPARATION FOR THE LIFE-NEEDS OF THE GREAT MAJORITY WHO DO NOT REACH THE HIGH SCHOOL

FLORENCE E. ELLIS, SUPERVISOR OF DRAWING, PUBLIC SCHOOLS
CLEVELAND, OHIO

Better preparation for the life-needs of the great majority who do not reach the high school seems a fitting subject for our consideration. Indeed it is a vitally important subject at the present time when the curriculum is undergoing radical reconstruction and the school is seeking better adaptation to the needs of the children whom it serves. In the past, courses of study were formulated without much regard to environing conditions and chiefly with reference to the content and logical arrangement of subject-matter. They were, in consequence, better suited to the needs of the few who were able to continue thruout the course than to the great majority who must at best leave school early in the grammar grades. Now the school is asked to teach not only what is good for the child, but what is best for the child. Every topic must be questioned with reference to its significance and value in the life of the child in the light of all the prevailing conditions. Its value in comparison with other possible topics must be determined, and a perspective of values must be observed in the selection of subject-matter.

It is estimated that about 40 per cent. of the children leave school by the end of the fifth grade; that by the end of the sixth grade more than 50 per cent. have left; and that only 33 per cent. remain to complete the eighth grade, most of whom do not enter the high school. Thus the great majority leave school to become citizens and wage-earners with a training not beyond that of the sixth or seventh grade. What influence should these facts have upon our plans of work and methods of instruction?

Again, it is estimated that 96 per cent. of the American bread-winners are engaged in commercial and industrial pursuits, while only 4 per cent. are in the professions and the public service. The situation that confronts the school, then, is summed up by saying that the elementary schools furnish the only training received by the great majority, who leave to become citizens and bread-winners and who must furnish the skill, the taste, and the ideals which will dominate the masses in the community. The large numbers that gain a livelihood by manual labor and the still larger numbers that leave school at so early an age make an insistent demand for a practical education in the grammar grades, an education that fits more fully for life's work, its duties, and responsibilities.

This early preparation calls for simple and direct methods of instruction, and a minimum of waste in time and energy. Everything that is good cannot be taught in the time at our disposal. Relative values must be determined; eliminations must be made. Every step must have a reason for its existence,

must serve a purpose, and must be a means to an end. Only in this way can the requirements and difficulties be met and the best returns insured. Better preparation for the life-needs of the majority demands, in the grammar grades: first, consideration of relative values; second, fewer things attempted and greater efficiency secured; third, more purposeful instruction.

The time in school for most pupils is short. Topics must be carefully weighed; only the most vital, the most fundamental, must claim attention. But which phases of work are most vital, most fundamental? Flowers, fruit, and other nature forms are such excellent material for training in careful seeing, and are such a valuable source of design, that the drawing of these must certainly be regarded as essential. Object drawing as training in seeing correctly, in accuracy, in grouping, in teaching what is good in form is indispensable. Design, one of the most fundamental of art subjects, must not suffer loss. Elimination seems impossible in considering these subjects; but are not modifications possible, indeed desirable? Considering conditions in the public schools, the limited amount of time at our disposal, the immaturity of the child, and the technical difficulties involved, pure water-color in the grammar grades, indeed all color except for purposes of design and decorative treatment, could well be omitted. Pose drawing and for the most part landscape seem to offer less of real value for similar reasons. It is doubtful whether at this point of development the results obtained in these subjects are commensurate with the time and energy expended upon them. Appreciation, which we all acknowledge as the purpose of instruction in these subjects, is better gained in a study of the masterpieces—in learning what is really good and great in art.

In the primary grades a variety of subjects and mediums has been given and a variety of experiences has been gained. Free expression and illustration in connection with other studies and in connection with life drawing, landscape, and similar work has played an important part. Design and construction have also received a large share of attention. Color has been freely used. The work has been varied and full of content. The child has been awakened to the beauty in nature.

He comes to the grammar grades capable of greater application and longer sustained interest. The variety and frequent changes in subjects and mediums required in the primary grades are no longer necessary nor desirable. Work that is good—as good as the child is capable of making it—only is worth while. Hence, fewer things attempted and greater efficiency secured in these are now of paramount importance. The steady gains in accuracy, in concentration, in will power, in confidence, in efficiency, in character, the consciousness of growth in power and in personal worth which follows such effort, crowns the work with a success not measured in terms of learning alone, not in doing alone, but in higher ideals, in a fuller and more complete living.

Our chief concern is the greatest good to the greatest number. The few, relatively speaking, who go beyond the grammar grades can without experi-

encing loss in any way wait for the omitted subjects and mediums until the high school. We are now considering a better preparation for the life-needs of the majority than could otherwise be offered, not primarily an education in art. In the grammar grades especially, relative values of subjects must be carefully considered, to the end that there may be fewer things attempted and greater efficiency secured in what is undertaken.

The common problem—yours, mine, everyone's—
Is . . . not to fancy what were fair in life,
Provided it could be, . . . but, finding first
What may be, then find how to make it fair
Up to our means; a very different thing.—*Robert Browning*

After an elimination of topics mentioned as seemingly of less value under present conditions, there still remain in the grammar grades drawing from nature forms, design in its various phases, construction and decoration of simple articles, object drawing, and illustration. We have as mediums the pencil, brush, and ink or neutral color in representation; water-colors, crayon, and ink in design; cardboard, colored papers, textiles, and wood in construction. This concentration upon that which is at this period most essential is economy in time and energy on the part of both pupil and teacher.

Simplification, as we well know, must be the next step in educational progress. In art as in other studies greater limitation in the range of subject-matter must follow. Enrichment has gone on until we have a congested program which brings to the child a bewildering variety of topics. This fosters superficial work, lack of thoroughness, and want of skill and efficiency. To control a few essential principles and to be able to apply these to the everyday pursuits and activities of life is of far greater value than to hasten over many things without gaining power or skill in any. The art of the masses must grow simpler in its form and increasingly practical in its expression. There must be a more purposeful instruction.

To make art instruction more purposeful there must be general recognition of the inherent value of the work. When teacher, pupil, and public realize the great service of the arts in the training of the eye, the hand, the mind, the soul; the vital relation they hold to the general curriculum, interrelating and in close harmony with other subjects; the important part they play in discovering the natural ability of the child and in what he is most interested; and when it is realized that the arts have a commercial and an industrial value; that they fit for the most complete usefulness; that they bring beauty, idealism, and contentment into the homes of the nation, much will have been accomplished in the way of purposeful instruction. An understanding of the aim of the arts in education and a knowledge of their close connection with the everyday work, the recreation, the home life, the civic life of the people, give to teacher, pupil, and public a personal interest in the subject, a realization of its practical worth. There must be in the instruction a strong appeal to the common needs of the people and the satisfying of these needs must be

evident. For example, if the study of nature leads the child to have flowers, vines, and shrubs in the yard, and plants in the home; to arrange flowers; to find enjoyment in simple, wholesome things; to spend his holidays in the woods, the parks, or by the lake rather than at the cheap theater, a need of the people has been met. If design teaches reserve and harmony in color, good proportion, pleasing spacing, balance, rhythm, good taste applied to the dress, to the home, to the industries, another need of the people has been met. Such instruction in art is of great significance to the girl in making her a better housekeeper, milliner, dressmaker; to the boy, in business and in industrial life. It serves its purpose in greater efficiency, in higher ideals, and in more complete living.

In conclusion, I repeat, better preparation for the life-needs of the great majority who do not reach the high school must mean in the grammar grades particularly: first, a consideration of relative values of subjects taught; second, fewer things attempted and greater efficiency gained; third, more purposeful instruction.

The schools and the public have a right to demand this adaptation of art instruction to the requirements of the masses that the great purpose for which education exists—namely, the building of character and personal efficiency in life—may be realized.

ART IN THE HOME

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Art in the home, as a reflection of the happiness which comes from appreciation of beauty in color and arrangement, is far from being universal. In fact, it is a serious question whether the development in aesthetic appreciation, as shown in the lives of our people, at all justifies the present methods of that education which is flaunted with so much pride as the fabric upon which our democracy is built.

There is to artists, teachers of art, and people to whom beauty is life, an appalling picture in the failure of a man to house himself comfortably, simply, and beautifully. Is it right to say that this failure of civilization, of life, to express itself is irreparable? I would suggest that the ignorance or indifference of our educated people and our social and philanthropic leaders toward this phase, not only of their own living but that of the people whose conditions they are trying to make better, be squarely faced.

How many of us, teaching art with the thought of beauty constantly before us, marvel at the barrenness of the homes of our friends, fellow-teachers even, of subjects as closely related to spiritual ideals as poetry and literature—subjects as much a part of man as history and natural science.

In teaching those subjects from which most might be expected the one step farther into the realm of home or vocation in life seems to have been

missed. We all recognize the dear college professor who, living the happiest, if the fewest, hours of his life in his beloved garden, sought to bring some eternal spring into his city study by taking a daffodil to the workman who was to paint its walls, saying, "There, that is the color I want. For me there is nothing to equal the joyousness of the daffodil." The workman smiled. His color sense had been modified by experience, if not joy. It was pathetic that the man endowed by opportunity with the greater capacity for enjoyment was really on no higher plane than the laborer. Some of the same inconsistency extends into the world of sounds. Musicians to whom a false note is torture live serenely in homes where harsh voices are the rule. If simple habit dulls the sense to finer feeling, how much greater is the obligation resting upon us as teachers to influence these habits in right directions.

In the apathy which begins when the material need of the household has been gratified, there is illustrated a curious phase of human nature which keeps people forever dully doing things over and over in the same old way, altho there is no longer any need for it, or even common sense in the method. By what logic is the privacy of a back yard in a tenement district preserved by an eight- or even twelve-foot fence? Almost no family life is carried on in the basement and garbage is removed mostly from the area door in the front. Even the sacredness of the family wash is not preserved, for the little pen is community property. Economical pressure has increased the height of the buildings, but the fence remains as the social habits of the English or Continental cottage dweller placed it. Just as unreasonable is the building of elaborate mantelpieces into houses which do not even boast a gas grate.

I believe firmly that the little we have of art is facing in the right direction. We are compelled to admit that until recently it has been a negative growth in this country; but the opportunities for its development in the future are unlimited and their improvement should be positive. There never has been a moment when the outlook has been more cheerfully free from the domination of European traditions and importations. It must be allowed that the average department stores are harmful museums of abominable things made in Europe for trade here, and our architects and interior decorators are still doing things in periods Georgian, Italian, Renaissance, etc.; but the influence of a limited public and the education of children in our schools who, it must be remembered, are always a generation ahead of their elders, are making a marked difference in the direction of simpler furnishing and better taste in dress. It is a foregone conclusion that the leavening of taste must come thru society, yet it is interesting to note what is being done in certain commercial activities, paralleled by much literature on the subject. The character of *The House Beautiful* is implied by its title. *The Craftsman* has carried on in its magazine and its workshops a healthy fight for freedom of expression in beauty, usefulness, and durability, by adapting its principles to all conditions and environments. *The International Studio* is sounding its voice at one end of the scale, and the tremendously popularized *Delineator*, *Ladies Home Journal*, and similar

magazines are keeping up a lively interest in all things new. Firm believers in evolution thru patient repetition, illustration, and example, cannot overestimate the good services of departments which show in concrete form good taste opposed to bad. In such weekly capsules may be served up mantel-pieces or hats, curtains or coiffures, jardinières or rugs. In each the eloquence of simplicity in form and decoration, as opposed to the utterly imbecile which masquerades as art, must arrest the attention of many and hold some. Again, much can be said of the influence wielded by the art-crafts societies in this country. The reaction felt in such factory products as furniture, jewelry, and pottery may easily be attributed to this movement. Just in proportion to the fineness of the hand-made article and the social value put upon it, will the machine-made product find new thought in its development. In the final analysis, the burden of responsibility for the more intimate relation of art to the home must lie with us, as teachers of art in the public schools and schools of higher grades.

It is undoubtedly true, in this country at least, that artists and art teachers have in the past missed rare opportunities for working with people. Intensive studio methods have related color and form to abstract problems or pictorial representations rather than to a concrete form of culture which contributes to the higher life of the individual thru his everyday experiences. Even now we often find in our art, manual-training, and domestic-art classrooms perfectly accurate manual results, complete control of the practical mastered, but, in the very uniformity of the accuracy a perfunctoriness which stultifies the purpose of the lesson—the escape of the soul into higher life. No shading of the correlation of art and manual training should be finer than that in which this need of the pupil is adjusted. Every right-minded teacher should appreciate the fact that art is for the race, and nothing of its kind too rare or beautiful for its heritage.

In successful art education the spirit of the work must not be confined to the hours of the studio classes. The question of time is always brought up against anything which suggests extra work; but for the ideal teacher, who can vitalize all of the work of the school with the touch of beauty, there is no necessity for prescribing the amount of time to be used. Indeed there is danger of giving undue emphasis to work which is loved by teachers and pupils. I should say there is no work taken up in the school which can be made more interesting than that to which art is applied. To foster its growth means work on the part of those directing, for pupils must see results, must be led by example as well as precept, and not only the reason but the thing itself must be shown. It is in material to illustrate good taste in everyday objects that our present system of cultural teaching is weakest. How can fine form-sense be taught except we have fine forms to show? How can appreciation of beautiful color-application be developed except thru visual comparisons? In the work rooms of such schools as are distinguished by good results in art, the teacher has created with expenditure of time and labor a proper environ-

ment for each particular exercise. The studio is as far as possible a beautiful, restful place, into which the idea to be discussed enters naturally. The difficulty of getting and maintaining individual collections for proper illustration, as well as the expense for which no allowance is made in teachers' salaries, will, under present methods, continue to limit the results of cultural teaching. Even in those communities where museums of fine art have existed for years their assistance is proven inadequate. It is true that collections have until recently been arranged for specialists rather than to interest the average visitor, and it is also true that their message is almost entirely from the past. The instruction given by the docent must have for the majority more sentimental interest than practical application to their own environment and habits of living. The work of the art museum as at present conducted is good but insufficient. I believe that an industrial museum is a necessary part of our educational system—not only a place where pupils can be sent to see things, but the collections of which are available for use in classrooms. In St. Louis there is now a practical working museum from which any grade teacher can draw natural-history specimens, physical-geography apparatus, etc. I have not ascertained that illustrative-art material is included in its collections. Just what these museums should contain might be open to discussion, but I would beg that they have space for the education of living which should be equal in importance to vocational training. Let them be industrial, but in that sense in which the exhibits touch the lives of the people, broadening the sympathies of all classes, adding to their powers of self-expression by showing them better and more beautiful things than they have known before. As an illustration take the one problem of color. To what has our teaching led us? Any excursion however limited thru our streets, our shops, our homes, brings a blush of humiliation to the cheeks, as well as sorrow to the hearts of art teachers for all that is worse than missed of human enjoyment. There is no accident in the flowering of art. Even in those countries where the finest artistic feeling seems inherent, all its attributes are fostered and cultivated. In Japan it is worshiped. National honor is paid to the creator of beauty, and in the small things of life rather than in the larger monuments do we find most complete aesthetic expression. The Japanese personify the logical art for a democracy—the art in which the people have a part.

Public libraries are, in individual instances, doing marked service to the art interests of the communities in which they are located. Seeing pictures of things and reading about them cannot take the place of objective instruction, but thru them a suitable setting can be given to many schoolroom exercises. Thru libraries culture is being extended in many ways. Splendid comparative illustrations are given of art expressed by peoples in various countries and under varying conditions of civilization. With the co-operation of manual-art teachers, this work could be extended to the collection of photographs, stereopticon slides, the preparation of bulletins of practical plans and specifications illustrating how ways of living may be adapted to

environment, needs of the family and their income, and showing that beauty and good taste depend upon adaptability to the temperament and vocation of the inmate of the home quite as much as upon the money spent in planning it. After regarding the constant misfits in the furnishing of our homes, one is inclined to say the atmosphere which is created by the inmates makes the home. Better the unrelated lines in furnishing and color-combinations which service has saved from crudeness, when with them there is a feeling of happy adjustment of comfort to purposes of living.

It is in cities that conviction of the dire need of help crowds upon us. Here apathetic dreariness abounds. There is on every side a dull repetition of ugliness among people who are paying for it with money which they can often ill afford to spend. Here we find that the worst possible things from the point of utility as well as art are brought. There is a moral obligation in this form of spending which is quite as much material for Sunday-school co-operation as those commendable movements in which church study among young people is extended into knowledge of civil laws for the improvement of society. The social regeneration of people thru better use of economical conditions is one of the problems with which art should be identified. Investing average life with dignity is surely as important as making laws for reform of evil. Societies which are working for the purification of nickel museums and the abolition of colored supplements as they appear in our Sunday papers might well co-operate with the public schools in their efforts to send the message of beauty from the classroom to the home. Reforms can be accomplished if even a few people believe in them and are willing to work heart and soul for the cause. In Harrisburg, Pa., the whole aspect of the squalid, even dangerous, life along its disreputable river front was changed into wholesome beauty by the courageous and untiring efforts of one woman. In Houston, Tex., a house-to-house canvass secured the funds necessary to replace all of the unsuitable pictures which had been hung on the walls of its public schools with others which adequately illustrated a high type of art, as well as some wholesome thought for the grades in which they were placed.

The middle class of society is the one in which our art education can most reasonably hope to work for results. Thru efficiency here conditions would eventually be bettered at both extremes. The power must eventually rest with the great public-school system. Its steady advancement along the lines of industry, social and economic, the establishment of courses of industry, of commerce, and of home science offer untold opportunities for beauty, in which the special teaching of art departments should co-operate.

The criticism of home adornment, if personal, would rightly be resented; but the confidence which parents grant to the instruction given their children in school makes this channel for special suggestion a valuable one. Illustrated lecture courses in home art might well become a regular part of the work taken up in such community clubs and mothers' meetings as are already organized in most school systems.

I have recently become acquainted with the home-gardening and school-gardening work in Cleveland, and I would like to call attention to the significance of the beauty they have carried into unsightly places—embodying the lesson of cleanliness and order, as well as gratification to the natural cravings of many for the joy of living with growing things. In the work already accomplished here there is happiest anticipation of the home art which cannot be complete without talks upon flower and plant arrangement.

My own experience in teaching has led me to emphasize a few principles and simplify subjects with the hope of making the lessons sink deeper into the life of the pupil. With the same thought in mind I would like to suggest that our art embody the principles of beauty thru the elimination of much that is superfluous and cumbersome in our homes. Once fixing the idea firmly of having fewer things to live with, we have prepared the way for more thoughtful selection. With such a result would come critical judgment of quality in the material and its suitability to purpose and, let us hope, the added elements of beauty in color and form. These, and the larger spaces which a few objects in a room afford, furnish the opportunity for enjoyment which comes where intelligent selective judgment exists. Art will then grow out of the home rather than be applied to it.

DISCUSSION

W. E. ROBERTS, supervisor of manual training, public schools, Cleveland, Ohio.—In discussing Mrs. Smith's very suggestive paper, I have chosen to emphasize but one phase of the topic she has presented—the one of its relations to the public schools.

To one of unbounded faith in the power of the public schools to influence for good the lives of a community, the cultivation of an appreciation of beauty and a desire to express it in the intimate surroundings of the home is but another problem which our schools will assume, and eventually solve, as can no other agent.

Traditions, example, professional and business influences are minor agencies in the creation of taste, reaching but comparatively few. It is actual living and doing, coupled with precept and example, that lead to a desire to express in terms of real beauty. This the schools have accomplished to a certain extent, and this they are bound to do better as the problem is more clearly understood and conditions under which the work must be accomplished are improved. Unquestionably there is a movement toward saner courses of study in our schools in which less emphasis will be placed upon some of the so-called essential studies and more upon those that relate directly to the lives of the pupils. Already this appears in the establishment in some of our school systems of elementary and high-school courses in which emphasis is given to industrial work, including industrial art and home science.

There must be a much more intimate relation between the so-called art and manual-training departments as they have been conducted in our schools. Teachers of art must not be dominated by conventional courses of art as dictated by text and drawing-books, and must add to their working equipment some knowledge of constructive principles. Teachers of manual training should cease to bow down to the traditions of tool exercises, and acknowledge the value of products that are beautiful. Both should vitalize their work with projects of beauty and of value as well, intimately related to the home and life of the pupil, and so presented that they will open to him wider fields for thought and expression.

Form and color in their various applications and modifications embody the essentials of beauty, and are capable of expression in the simplest projects. Let me give a concrete illustration chosen from manual training, because that is supposed to be my department. The selection and framing of a picture is a problem in both form and color which may be most intimately related to beauty in the home. The examples shown are the work of seventh-grade children. In working out this problem the reverse of the usual manual-training order of procedure was followed. The picture was taken as the basis of the problem. The construction lessons were preceded by a class discussion of pictures and picture frames illustrated by examples. The discussion brought out the fact that beautiful pictures could be found that were inexpensive, such as the color illustrations in magazines and even the illustrations of many advertisements, and, further, led the pupil to distinguish between the good and the bad. The pupil then brought a picture of his own selection from home which was studied in relation to style and width of frame. A frame was drawn and cut from paper so that relations might be studied and changes made if necessary. An appropriate wood was chosen with close or open grain as demanded by the detail of the picture, and the construction lessons followed. Finally the frame was finished in color to harmonize with the picture.

The result of such a problem will be, in the majority of cases, a thing of beauty in itself, but it is when we project it into the home and present it in relation to its setting that we see the possibilities in so simple a lesson. It should be apparent that the same problem worked out in higher grades, with better appreciation and skill on the part of the pupil, would have a greatly increased value. Innumerable simple projects may be selected which will have a direct application in the home, and in the higher grades, with the art and manual-training departments working together in the development of practical furnishings, the possibilities are almost unlimited.

The adjustment of courses which will give the time and proper relation of subjects is surely coming, when the influence of the schools will be direct, and greater beauty in the home will be one of the results.

THE INTERNATIONAL CONGRESS OF ART IN LONDON

CHARLES M. CARTER, DIRECTOR OF ART, PUBLIC SCHOOLS, DENVER, COLO.

The idea of holding congresses of art teachers originated in Paris in 1900, the first congress being held in connection with the International Exposition of that year. Those of us who assisted at this first congress did not realize that it would result in future congresses as important as that held four years later at Berne, and the one held last summer in London—the latter a congress and exposition of truly grand proportions. Really one could hardly expect anything else when we consider the vast amount of preparatory work. For fully two years previous to the London congress the American official committee, and its auxiliary advisory committee, were actively employed in working out the details which bore magnificent fruit in the presentations made at London. Undoubtedly respect for our achievements in art education was considerably augmented. The American methods were frequently the subject of discussion, and our exhibits were under the constant inspection of throngs of art teachers.

The organization of American interests was probably as thoro as that of any other nation, and was very complete in all respects. Time will not permit me to dwell upon the details of preliminary preparation. They were

under the direction of our most prominent art educators. A special curator was appointed to accompany the exhibit abroad. Our installation was as complete and perfect in detail as that of any other nation.

Thanks to agitation in our country, upward of two hundred American art teachers were present. One evening a large number assembled at St. Ermin's Hotel. It was, indeed, a remarkable sight to see such a gathering of American art teachers in a foreign land. Unquestionably we showed the greatest interest in the congress of any foreign nation, if we consider alone the considerable travel and great expense incurred by our colleagues.

Not only did we make a notable presentation in the way of speeches and exhibits, but also by means of an elaborate illustrated book on *Art Education in the Public Schools of the United States*. No other nation showed anything approaching the value and completeness of this book. The only other publication of the kind we know of was a small German pamphlet.

South Kensington and the university building offered palatial places for the meetings and exhibits. The amount of matter presented to eye and ear was truly overpowering, and it was with difficulty that one could arrive at conclusions. But, all in all, this wealth of material made a very impressive whole, and undoubtedly impressed the world at large with increased respect for the cause we represent.

The exhibits naturally were the first thing to attract attention. They represented work all the way from the lowest primary to the most advanced productions of the industrial and fine-art schools. The subjects of study showed themselves to be much the same the world over. Their presentation by drawings and paintings, however, showed great diversity, particularly as to that comprehensive term "drawing." Thoroness and skill showed much more in some exhibits than in others. Some exhibits were particularly impressive because of their direct application to useful purposes. Roughly speaking, the work shown referred to that of children, to young people connected with industries, and to advanced work of adults. Some represented work from pupils who devote but part of their time to drawing, while other work came from persons devoting practically all their time to art study.

The first important impression was perhaps the thoroness characterizing European work, which led us to reflect that we may not be altogether right in our slap-dash, free-expression ideas, particularly in elementary schools. At the same time it must be noted that our foreign friends showed great interest in our methods and results, and evidently were somewhat envious. They called attention to our lack of careful drawing. It is all well enough to desire "freedom" etc., etc., but there seems to be a feeling that there is nothing which will take the place of painstaking study. The great desideratum seems to be to find a method which will adequately embrace both freedom and careful study—a method which shall develop technical skill, and at the same time disseminate art ideas, and cultivate an appreciation and love of the beautiful in nature and art. All of this manifestly requires time, and, as far

as elementary schools are concerned, it is a well-known fact that the amount of time at our disposal is so inadequate that we cannot much more than introduce there ideas. It may be interesting if mention is made of more detailed features which attracted our attention.

One was drawings on an enlarged scale, particularly of plants and insects—a method which helps to give a certain largeness and effectiveness to designs which would not result from continually making diminutive studies.

Another feature which commended itself was making drawings directly from nature, not of the exact form of the subjects, but of the ornamental treatment they suggested. Drawings and paintings made in this manner seemed to have a certain vigor and distinction not always found in ornamental forms derived from exact representations in preliminary drawings and paintings. It seems to us that we could advantageously make use of this method both in our elementary and advanced study.

Germany showed some photographs of miniature houses, and adjoining trees and shrubbery, constructed by pupils, which showed excellent consideration of lines and masses in their picturesque and artistic relation to each other. Certain industrial schools devoted to the development of particular subjects were very interesting. For instance, one school showed various exercises on a large scale illustrating the manner in which sign writers are trained.

To a certain extent the character of the nations seemed to be reflected in their exhibits. France showed considerable work illustrating their free artistic manner of handling plant form; while the Germans and Austrians showed a more restrained and formal manner of using the suggestions they derived from nature.

Note should be made of the installation of the various exhibits. The international committee in its preliminary conferences committed itself most heartily to the idea of arranging the details so that uniformity and distinctness of presentation should make the exhibits easily understood by the visitor, who more than likely would tend to feel overpowered by the vastness of the exhibition. Thus it was that certain rules were adopted looking toward these desirable ends. Unfortunately, however, changes in the assignment of space, and in decreasing it, led to arrangements which were but little improvement over ordinary exhibitions. As a general thing there was a lack of complete artistic finish. Irregular placing of work, failure to cover bare woodwork, etc., were details possible to rectify, but which in many cases were allowed to go uncorrected. We are pleased to say, however, that the United States exhibits were carefully and artistically arranged with respect to every detail. As a consequence, the general effect was as pleasing as circumstances would permit, and one could trace easily the steps of development.

While many of the industrial art schools really have drawing and painting closely related to the construction of objects, this feature was not very fully represented by the objects themselves. This was probably due to the expense and difficulty of transportation.

In the United States our exhibitions often show a liberal display of constructed work in connection with drawing. But this feature at London was quite inadequately shown from our country, and was almost entirely lacking in others.

The transactions of the Congress are reported in a volume of about six hundred pages containing matter in three languages. The professional director of art should study this volume as indicating the trend of modern art education. At this time we can only call attention to some of the most important ideas presented by speakers of different countries.

The report from France, edited by Professor Alfred Keller, stated that "education in the school and in the family, to be intellectually complete, must be artistic, and at the same time scientific;" that works of Phidias, Michael Angelo, Raphael, and many others were too advanced for the understanding of children; that subjects truly childish were best, and that they should be natural and not antique; that respect should be cultivated for good local art and architecture; that children may exert an important influence on home art.

Mr. Leon Rioror, an acknowledged authority on "*l'art à l'école*" presented many valuable thoughts among which were the following:

The school cannot create geniuses, but it can give children a love of the beautiful leading them to prefer that which is beautiful to that which is not, and to distinguish between things not equally beautiful. He calls special attention to the value of enlisting the services of professional art students in decorating schoolrooms. This method of securing decorations is in operation in Chicago, the students of the Art Institute having executed several valuable examples. Decorations should be furnished at the expense of towns and cities. Visits should be made to museums and works of art.

The society which M. Rioror represents, "*L'Art à l'Ecole*," has a broad aim which includes what we ordinarily understand by schoolroom decoration; but in addition the cultivation of flowers and trees, and a consideration of art in the streets, and buildings, and emphasizes the importance of organized visits to museums and workshops, and the holding of "*concours*" of art industry.

A dissenting note came from Austria to the effect that:

it is a debatable question whether pictorial and sculptural decorations are advisable at all in the schools. They distract the attention of the children from the teachers, or, what is more often the case, the children do not observe them.

It is questionable how far cheap reproductions should play a part in the artistic education of the children; or if they are of any real value at all, from the point of view of training the aesthetic sense. After all, the best teacher is Nature, and every moment we keep our children in the schoolroom or in the school museums, observing nothing but what is a dead letter to them, is taking them away from something which is very beautiful and very pleasurable for them.

I object strongly to school museums and collections, except as far as the children can collect them themselves, and in every way make the museums for themselves. Above all I would have a little menagerie of household animals attached to every school.

There was an extended consideration of the training of art teachers. The representatives of different countries seemed to agree that the methods of study in the past emphasized too much examinations and the development of personal skill; that greater attention should be devoted to psychology, pedagogy, etc., to an extent similar to that devoted to these subjects in training teachers in other departments; that, finally, the art teacher should in every respect have a training and a standing accorded to teachers in other subjects, notably science and letters. A resolution was passed to this effect.

This subject has been studiously considered in several countries, notably by Dr. Kerschensteiner, of Munich. He has devoted several years to exhaustive study of the drawings of children. Among conclusions he deems as absolutely correct are the following:

In primary schools at least, boys and girls require a different syllabus. Brush work should be preferred to all other technique in decoration drawing. As a rule drawing from nature cannot be successfully taught in class before the age of ten. Where the systematic class teaching is begun at an early stage, it is desirable to organize it exclusively as drawing from memory following class discussion. Drawing from good copies should have no place in classwork, but it may be unreservedly recommended for homework.

Mr. E. Cooke, of England, who had considered the same subjects, disagreed with Dr. Kerschensteiner in several particulars.

After all, the most important feature of any gathering which brings together from various parts of the world persons interested in some specialty is the personal contact with leaders whom we may have read about but never met. The London congress was no exception, and surely our American friends must guard the pleasantest recollections of the fraternal spirit which manifested itself decidedly, and which will lead us to anticipate future congresses with great pleasure, as enabling us to renew the friendships formed in London.

Of the general functions, one of the most important was the reception held at the Victoria and Albert Museum, an ideal place for a grand affair of this kind. The Duchess of Sutherland gave a reception to seven hundred members at Stafford House. A reception was held at Leighton House and in the evening the president of the congress and Lord Stanley of Alderley gave a dinner to the congress delegates at the Franco-British Exhibition. Several metropolitan schools of art entertained members. The Duchess of Wellington, Miss Gray, and Miss Watts were among others entertaining. A special visit was made by invitation of the king to Windsor Castle.

The American committee, in particular, was favored with many agreeable social attentions, among the most delightful of which were dinners given in their honor by the Earl of Carlisle, president of the Congress, and August Spenser, Esq., principal of the Royal College of Art. The latter gentleman also kindly entertained the American official committee at his beautiful country home.

The interest aroused over the American exhibit was so great that the composite exposition was broken up and portions sent to European cities for

further exhibition. The Parisian authorities in particular made arrangements for the showing in Paris of several of the American exhibits.

Altogether the London congress has given a great impetus to the cause of art education in its application to industry, and the development of art as an important feature of life.

A COURSE OF STUDY IN FREEHAND DRAWING AND APPLIED ARTS

W. H. ELSON, SUPERINTENDENT OF INSTRUCTION, CLEVELAND, OHIO

It is not the purpose of this paper to propose a course of study for the consideration of this department. My problem is a simpler one. I am to report to you the recent action of the college-entrance association in making a definition of units of work in art, setting minimum requirements, fixing a general outline of the elements of a standard course of study, and offering a credit-allowance of two units. Incidentally I shall mention the meaning of this action and speak of the distinct advantages which it brings to this subject as a high-school study.

What the school shall teach is becoming increasingly difficult to determine. This is true not only as to what branches shall be taught but also as to what parts or phases of each study shall be selected for treatment. In short, the course of study is under inquiry. Democratic society demands a school suited to the needs of every variety of citizen, a school varied in its subject-matter, flexible in its methods, and efficient as an instrument of culture. It must appeal not alone to one type of mind and one kind of interest, but to a variety of minds and to a many-sided interest. A high school intended for the whole community must seek to find out and develop the special aptitudes of its students and give attention to individual ability or inclination, economic status or outlook. A high school that meets these requirements offers free-hand drawing and applied arts as an elective study and gives reasonable credit-allowance for the work done. Of what shall this course consist?

The need for a standard course of instruction in art for high schools is very great. In the past, courses in this subject, like Topsy, "just grew"—were developed by the individual teacher without guidance or supervision and in accordance with her special interest or whim, and in many cases under the limitations of inadequate equipment and materials. It is not surprising, therefore, that these courses were often one-sided and fragmentary, inadequate and incomplete. Generally speaking, the subject was not pursued seriously nor under favorable conditions. It was not given the recognition in the program of the school which its intrinsic value and increasing significance in common life warranted; it was regarded as incidental rather than fundamental and as essentially less educative than the so-called culture studies; it did not take rank as a standard study, did not count as credit toward graduation, nor yet as college-entrance subject-matter. When elected, the work

was taken in addition to the required work of the school and suffered neglect at the hands of excessive demands upon the student in other subjects and departments. Under these unfavorable conditions no branch of study could prosper or develop a fundamentally strong program of work. Students who elected art work did so because it appealed strongly to their interests and tastes. From necessity, the teacher, naturally solicitous for the upbuilding of her department, was guided in the selection of topics or phases of work rather more by the attractiveness of the topics to students than by their value in developing art principles and power in pupils. True, in an occasional high school the study has been pursued seriously and credits toward graduation have been given; but speaking for the great majority of high schools of the country, this has not been the case. Again, the need for adequately trained teachers has been a hindrance to progress and the discouraging condition of the study has not strongly influenced teachers to fit themselves thoroly for the work. A smattering of this or of that was thought sufficient to justify the candidate in seeking any position, however responsible.

Recognizing these conditions, the Western Drawing and Manual Training Association directed its efforts toward placing this study upon the list of college-entrance subjects. A committee was appointed to urge such action, an outline of work was formulated and submitted to the college-entrance body for its approval, and at the last meeting of the North Central Association of Colleges and Secondary Schools a definition of units in freehand drawing and applied arts was adopted unanimously, with a credit allowance of two units. Following is the outline:

NORTH CENTRAL ASSOCIATION OF COLLEGES AND SECONDARY SCHOOLS

DEFINITION OF UNITS IN FREEHAND DRAWING AND APPLIED ARTS ADOPTED

MARCH 27, 1909

HOOR BASIS FOR CREDIT (2 UNITS) 240 HOURS FOR EACH CREDIT

Approximately one-third the time should be given to representative drawing and two-thirds to decorative composition, constructive and decorative design, construction and applied design.

- a) PICTORIAL—Plant Study (Flowers, sprays of leaves, seed pods, etc.)
 - Object Study—(Perspective).
 - Landscape—Roof studies, buildings, etc. (Perspective).
 - Pose Drawing.
 - Composition.
- b) DECORATIVE COMPOSITION—Plant forms, object study, landscape, pose.
- c) DECORATIVE DESIGN—Plant analysis (for the purpose of design).
 - Conventionalized plant forms.
 - Decorative units, borders, surfaces, corners, rosettes, posters, book-covers, etc.
 - Stencils—Wood-block printing.
 - Historic Ornament.
 - Arrangement of straight lines, and of straight and curved lines.
 - Geometric design.
 - Lettering—Illuminating.
 - Schemes for Interior Decoration.

- d) CONSTRUCTIVE DESIGN—Designs for pottery, leather, metal, bookbinding, furniture, cardboard construction, textiles, etc.
- e) CRAFTS—Pottery, leather, metal, bookbinding, furniture. (Choice of one or more of the above crafts.)
- f) APPLIED DESIGN—Design applied to the crafts and to cardboard, textiles, etc.
- g) ILLUSTRATION.
- h) TALKS ON HISTORY OF INDUSTRY AND ART, on civic planning, domestic architecture and decoration.
- i) INSTRUMENTAL DRAWING to be given as needed to meet the requirements of practical designing and construction.

NOTE.—Mediums used—pencil, charcoal, water-color, crayons, brush and ink, and a combination of the pure mediums.

That the above outline of work was unanimously adopted by the College Entrance Association is significant of the growth of sentiment in favor of college recognition of art instruction when it is made to mean something strong and vital, closely related to life-interests and life-needs. This action on the part of the North Central Association of Colleges and Secondary Schools gives deserved recognition to one of the most important and most useful branches of high-school instruction. Freehand drawing and applied art may now take on new and added dignity and assume its rightful place in the list of college-entrance subjects. It should share in the better instruction and the more adequate provisions which have affected favorably high-school instruction in other college-entrance studies.

The outline recognizes that our civilization is essentially industrial, our citizenship cosmopolitan, and our life essentially urban. It has for its controlling aim the improvement of industry, of the home, and of civic life, by a training of eye and hand and taste. It seeks primarily appreciation of beauty in the useful arts, and the cultivation of that taste and skill most needed in industry and in the home—the training of the industrial worker and the home maker. It assumes that art in the public school should be kept close to its practical uses in industry and life, both for the sake of industry and for the sake of art. In a word, the outline seeks an appreciation of art in its application to production, to home-making, and to personal living. These general considerations account for the assignment of two-thirds of the time to decorative composition, constructive and decorative design, construction and applied design, as against one-third to representative work. It is for these reasons that not only the history of art is listed for study but also the history of industry. It is for these reasons that the outline gives prominence to work related to the fundamental crafts and industries—in wood, metal, textiles, and pottery, rather than to the less substantial types of work. It is for these reasons that the productive and creative output is made the test of knowledge and skill.

The outline is intended merely to give analytically the elements of a course of study in art. There is no thought of sequence in the arrangement of topics, nor that this order should be followed by the teacher. For whatever of

suggestion and value it may be, I submit the following concrete scheme of work based upon the above outline:

A POSSIBLE WORKING FORMULA FOR THE FOREGOING COURSE

(Suggestive)

FIRST YEAR

FALL TERM

Pictorial—

Fruit, flowers, sprays of leaves, seed pods, etc.

In outline. In mass. Light and shade.

Mediums: Pencil, water-color, charcoal.

Decorative Composition—

Plant forms.

In outline. In mass.

Mediums: Pencil, brush and ink, charcoal.

Plant analysis (for the purpose of design)—

Mediums: Pencil, ink.

Design (conventionalized plant forms)—

Decorative units, borders, surfaces.

Make collections of plant forms to be used as material for design.

Plant studies made earlier in the year may also be used as material for design.

Mediums: Pencil, brush and ink, water-color, charcoal.

Construction of Applied Design—

Portfolios, etc.

WINTER TERM

Pictorial—

Object study.

In outline. In mass. Light and shade. Perspective.

Mediums: Pencil, charcoal, colored crayons.

Design—

Arrangements of straight lines (tile designs).

Construction of Applied Design—

Pottery.

SPRING TERM

Pictorial—

Object study. Plant study.

Decorative Composition—

Object study. Plant study.

Mediums: Pencil, brush and ink, charcoal.

Design—

Lettering and illuminating.

SECOND YEAR

FALL TERM

Pictorial—

Plant study. Landscape.

Mediums: Pencil, water-color, charcoal, brush and ink.

Decorative Composition—

Plant study. Landscape.

Mediums: Brush and ink, water-color, charcoal.

Plant analysis (for the purpose of design)—

Mediums: Pencil, ink.

Design (conventionalized plant forms)—

Decorative units, borders, surfaces.

Mediums: Ink, water-color.

Construction and Applied Design—

Leather.

WINTER TERM

Pictorial—

Pose. Winter landscapes. Roof studies, buildings (perspective).

Mediums: Pencil, water-color, charcoal.

Design—

Arrangements of straight lines, and of straight and curved lines, in borders, corners, surface repeats, etc.

Geometric design.

Construction and Applied Design—

Leather.

SPRING TERM

Pictorial—

Pose.

Pose. Landscape.

Decorative Composition—

Pose. Landscape.

Design—

Schemes for interior decoration.

History of industry and art, and reference reading to be given thruout the course.

Instrumental drawing to be given as needed to meet the requirements of practical designing and construction.

DISCUSSION

WILLIAM H. SMILEY, principal of East Side High School, Denver, Colo.—It is a pleasure to express my cordial appreciation of Superintendent Elson's thoughtful and clear presentation of this subject, and with much that he offers I heartily concur. There are some statements, however, to which I think some limitation should be set. For example, it seems to me almost too much to say that creative work is the basis of all art appreciation; and it is setting ourselves a tremendous task when we say that art instruction must have for its aim the development of the taste of the whole people. Perhaps it is well to have ideals of this sort everlastingly before us, and I presume that there is no line of education in which America has not started with a fine appreciation of the ideal to be realized, no matter what practical limitations we ultimately run up against. America has accomplished large things, undoubtedly, because she had large things in view; yet the danger in every department of education is that the very breadth of our purpose may result in only superficial accomplishments; therefore I greatly fear that in aims set so high as we have them in Superintendent Elson's paper, and in the definition of units as we have them presented by the North Central Association course of study, we may suggest to drawing teachers such a differentiation and diffusion of their energies as may result in weak and inefficient results. To criticize specifically the work outlined for the institutions belonging to the North Central Association, I would say that the outline for the four hundred and eighty hours to be offered theoretically covers all the work that is attempted in the most finely organized technical school for the teaching of freehand drawing and applied design. No teacher could apportion those four hundred and eighty hours in detail to the divisions of work indicated in that course without, as I have said, a dispersion of energy and a frittering away of attention that will, in the end, bring upon art instruction the same criticism that we hear applied to almost every subject in prepara-

tory work. If you will pardon a personal reference in explanation of the basis of this criticism—in order that you may understand that I do not speak from the pedagogical point of view of the theorist in aesthetics—I will say that I speak from the point of view of one who, under firm but kindly hands, was first taught to draw, and next to appreciate the plastic arts thru a disciplined hand and eye.

I will preface my more specific criticism of this high-school course by a single reference to the work in the grades. Now, whatever credit may be given to the results of art instruction, as regards appreciation of form, or color, or picture, this credit, at least, cannot be given to the results of such instruction—namely, that pupils learn to draw. The consequence is that they come to their high-school work, in the main, with very little expressive power of hand. The most fundamental principle stated in this course is that approximately one-third of the time should be given to representative drawing, and two-thirds to decorative composition—construction and decorative design, construction and applied design. I believe that I might have assented to this proposition if the apportioning of time had been reversed, and two-thirds had been given to drawing, and one-third to design. I think that this criticism is in line with statements of Superintendent Elson to which I am in duty bound to give my heartiest commendation and approval—namely, that the judicious selection of a few fundamental phases of work, and the doing of these well, are the prime concern; and that enrichment, thru judicious elimination, is the keynote of present demands in the curriculum. The emphasis placed upon plant study and plant analysis, for the purpose of design, is given such prominence in this course that I fear the results upon students and upon teachers. I doubt very much if pupils can ever learn to appreciate mass and composition and truth of line, with reference to growth, for use creatively, who have not first gained keenness of eye and readiness of hand, thru much drawing of simpler objects.

I am ready to grant all that is claimed for creative design as a stimulus to the student's interest, and an encouragement to his self-activity, and we all know the application that students will freely give under this spur; but we must not fail to realize that some of these students are laying the foundation for patient, continued study, and I hardly see how any teacher can fail to agree with me that for such these earlier years are to be the disciplinary years, and these are the years when they should learn to draw. I am not at all sure that it would not be better to make a sharp distinction in character of work assigned to those pupils whose aim looks forward to artisan, or artistic competency, in order that, at least, these elect may not suffer in their ideals and standards of what finished work should be. I do not believe that the road to efficiency can or should be made an easy one, tho it ought to be an enjoyable one. Consequently, I believe we should be cautious about laying too great stress upon creative design, that in its application may end in such slovenly craftsmanship as we see in much of the product of the present arts-crafts movement.

RUTH S. DALZIEL, art instructor, North Side High School, Denver, Colo.—It is very cheering to find drawing more and more recognized as a subject worthy of careful study, and great credit is due those who have worked to bring such a condition about.

This recognition is evidenced by the adoption of a course of study by the North Central Association of Colleges and Secondary Schools, and it is undoubtedly a great step in advance.

This course, as Superintendent Elson has pointed out, allows approximately one-third of the time for representative drawing and two-thirds for design. Whether this is the best possible division of time can only be decided by careful experiment with parallel classes and a thoro comparison of the work done during a period of two or four years. The experimental stage will pass more quickly if there is hearty co-operation between the schools using this arrangement of time and work.

Because children come to the high schools with such a difference in the standards of

their preparatory work in this subject, and because the course itself allows so much liberty to the teacher, it seems to me there is need to establish a minimum limit of passability, if I may use such an expression, as well as one for the average work. We must convince the colleges, if we want them to accept this work, that grades in drawing compare with as much accuracy as in other subjects. Let me illustrate: In mathematics we say a child has worked a certain percentage of examples from a given page in a given book, and you have a fair idea of his capacity; but when I say, "This pupil has an average of 90 per cent. on his drawing," you know nothing about it until you see the work, and, with your standard, it may be 70, 80, or 100 per cent.

The only way that I can suggest to establish this standard is by examinations, half-yearly at least, and including in future exhibits these marked examination papers, which will enable teachers to compare their work more accurately. In this subject, as in all others, the best pupils need no examinations; it is for the purpose of standardizing our mediocre and minimum work that this should be done. All examinations tend to develop self-reliance in the pupil and to give him courage to do independent work later. They will also help to keep the standard from being so far beyond the ability of the average pupil. I think if this is done our colleges will accept more readily the work for credits.

In conclusion, I wish to give my hearty thanks and appreciation to those who have done so much for the cause of drawing and applied arts in the secondary schools.

MRS. LE FAVRE, Denver, Colo.—Art in school work, in my opinion, finds its greatest usefulness in the inspiration it awakens in the pupil to look for the beautiful and the kindly harmonious everywhere. The late William Morris, of England, conferred a lasting benefit on human society when he united the utilitarian handicrafts to the classic arts. Commonly speaking, people working in factories and shops are not to have ideas; not to express them, surely, but to be mere machines or machine operators. William Morris invited ideas in his pupil workers and designs from them. There the artists and artisans wrought and thought together. They were happy and calm in the production of their fine hand-made wares. They had a season of mourning when they parted with a rug into which they had for several years co-operatively worked the artistic lines of their kindly imaginings. Several years of co-operative association on lines of this gentle endeavor had endeared this rug to them. Probably the most thoroly artistic room of these days for our study is the William Morris room in a furniture store at Chicago. The very highest authorities have so spoken of it. It was placed there by the admirers of Morris and fitted out with objects from the very hands of Mr. and Mrs. Morris—the last made being probably the book-covers. The ceiling itself is low, and with the objects of utilitarian art in sumptuously rich coloring, yet so mellow and softly blended and well related as to give a feeling of great rest and uplift.

In the hand of a school pupil well trained, objects of usefulness quickly lend themselves to artistic handling. While the pupil is thus engaged, admiration ascends and carries the consciousness into a new and higher experience. The character improves. The emotions being played upon, the involuntary functions are roused and set to the tune for better respiration, alimentation, circulation. Better physiological conditions displace those pathological, and good health results.

Art in school work, rightly pursued, is health-begetting; it inspires better scholastic endeavor and enables us to look for and find harmony and the good, beautiful, and true.

REPORT OF COMMITTEE ON UNIVERSITY ENTRANCE EXAMINATIONS IN ART

ARTHUR B. CLARK, ASSOCIATE PROFESSOR OF GRAPHIC ARTS, LELAND STANFORD
JUNIOR UNIVERSITY, STANFORD UNIVERSITY, CAL., CHAIRMAN

At the Los Angeles meeting, two years ago, there was a feeling that the time had arrived to define standard courses of art instruction. Your committee was appointed to prepare a definition and report at this time.

We found upon commencing our labor that the North Central Association of Colleges and Secondary Schools was already working on the same problem.

Their work was being so well done that we have awaited their results. These results have just been presented to you in a most effective manner by Superintendent Elson. The course of study which he has discussed is the definition of units which we present for your adoption.

You have discussed his report thoroly and your questions have enabled him to explain its strength in a masterly way. It is a cause for congratulation that a critical superintendent of schools is so abundantly able to expound the solidity and necessity of this step in education.

The insight which he shows into every consideration which properly enters into this problem is proof of the care with which the report has been considered and prepared.

This is not a theoretical course but a tried course, and represents a careful statement of the point at which art teaching has now arrived after many years of experience. It is a standard definition agreed upon by some seven hundred schools and colleges. Furthermore, the work done in the leading high schools today, from Maine to California, might be accepted as illustrative of this recommended course of study. The exhibits sent to this meeting confirm this statement.

The course is flexible, and should be. The particular teacher or school should adapt it to local and personal needs—thus: a teacher with a number of intending engineers or architects in the class might profitably emphasize constructive design at the expense of the printing crafts; a pupil interested in zoölogy might be allowed more time in animal or bird drawing and less in design.

A word as to the acceptance of these units by colleges and universities. Many people, worthy of all respect in other things, still think that art is for the few only, and that instruction in it should be conducted only in special institutions where people of this particular taste can be humored. Many have said to me "I want my son or daughter to get a broad education first, then after college graduation, if they still want to study art, they may go to an art school." As well graft an eighty-year-old apple tree.

A separation of a fundamental thing like art from a broad education is just as reasonable as it would be to postpone one's physical growth until the

mind had been stuffed with facts, or to devote two years exclusively to eating, then two to exercise, and two to thinking.

Art, science, mathematics, civics, these are all important to everybody. The person who omits culture in either is like a horse with a missing leg.

That art culture is to be an organic part of the educational system of the future is settled.

The colleges and universities have assented, in the abstract, to the principle that graduation from a thoroly conducted four-years' high school must permit entrance to the university; also to the principle that the high school has ends of its own more important than that of feeder to higher institutions. At the same time, the colleges and universities, in their influence, espionage, and printed lists of entrance subjects dictate to and warp the growth of secondary schools.

Suppose a boy had spent equal periods of time for four years in the study of literature, mathematics, science, applied art, and civics, he would be well equipped to study engineering or architecture, but would not be received in any of the universities belonging to the aristocratic "Association of American Universities." He could not find fifteen units of credit, which he could pass, listed in the subjects of the "College Entrance Examination Board." He would have to study further to make up for the time spent in study of applied art.

A graduate of Pratt Institute, who during three years of study had performed the work now on exhibition in connection with this meeting, would be magnificently started for a useful life, but could receive only one of fifteen required entrance credits in most universities. This is a great injustice. It almost excludes from the university at once an important branch of culture—it makes a three-legged horse.

That a set of college men could view this exhibit, or that of the grade schools and high schools of this city, and declare, in effect, that the culture so represented is inferior in value to any subject now on the accredited examination list, is unbelievable. I think they are too broad to do such a thing when they understand it. Our duty, then, is to make the college men stand before these exhibits and receive attacks of cold shivers as they realize that unwittingly they discourage this teaching and are the stumbling blocks in this line of progress.

We suggest that a number of traveling exhibits be prepared and sent to obdurate institutions, setting forth the attainments of a standard course of art, worth two units of credit. This will surely hasten the day of its acceptance.

But the university which admits the value of this work in the secondary schools may doubt its value as preparation for continuing university study. Does it prepare for anything? Yes.

In a study of the humanities, history, ethics, philosophy, or to give an insight into ideals of civilization, no avenue is more sympathetic than the fine arts; and no one can see with more penetration and sympathy than one who is

also an artist. Could not the sculptor St. Gaudens understand the Greek spirit quite as well as any classical professor at the American school at Athens? Can any adequate idea of Greek or Roman civilization be attained without the insight into art which the practitioner obtains?

In the biological sciences the increased power of observation and recording is amply worth two entrance credits. In literature the journalist is given an understanding of the art which today is so forcibly coupled with his own that it is often difficult to say which is more important, the text or the art used in illustration and bookbinding. Such books as *The Rubaiyat*, illustrated by Vedder, *Peter Pan*, illustrated by Arthur Rackham, and *The Wonder Clock*, by Howard Pyle, as well as the art in the monthly magazines, in which illustrators are quite as well known as writers, bear out this value of art as parallel with literature. What is more valuable to the merchant than a systematically trained taste?

In short, art is a great avenue of approach to the soul, one of its greatest manifestations, and the colleges and universities which stand for cultivation of well-balanced humanity cannot afford to crowd it out of their own curricula; or, if they do, much less can they afford to crowd it out of preparatory work in the secondary schools.

At Stanford we give one entrance credit in freehand drawing. Heretofore the credit has been allowed for ability to draw and shade a group of objects. Henceforth, by vote of the faculty in graphic arts, a knowledge of applied art and possession of good taste must also be shown. Hence at Stanford we already recognize this recommended course as to content and, I hope, with many other higher institutions, may soon do so in amount of the two credits.

Respectfully submitted,

ARTHUR B. CLARK, *Chairman*

FLORENCE E. ELLIS

HENRY TURNER BAILEY

THE AMERICAN FEDERATION OF ARTS

HENRY READ, MEMBER OF BOARD OF DIRECTORS, AMERICAN FEDERATION OF ARTS, WASHINGTON, D. C.

As I have the honor to address the Department of Art Education of this Association, I take it for granted that you desire to encourage a love of art among all members of the community, and my immediate object is to bring to your notice a movement that will prove an effective means of aiding you in your purpose. Fortunately, this will involve no discussion of educational theories or methods, and I may therefore count upon your undivided good will.

At no previous time in the world's history has wider practical recognition been given to the fact that "union is strength," and this has resulted in a multiplication of agencies that in many cases have proved to be only a dissipa-

tion of energy. Let me hasten to say that I am not here to advocate any addition to their number, but merely to make known a federation of those that already exist.

Before giving a detailed account of the American Federation of Arts, it may be well to consider what justification can be found for a national movement at the present time.

It is only within the memory of this generation that American art may be said to have found independent expression among us, and perhaps the most significant feature of its spirit today is to be found in the growing conviction that art is something more than painting, sculpture, or architecture. Very few of us have the power to become artists, fewer still can ever hope to rank among the immortals, and if personal fame were to be the sole measure of the value of art to the community at large, an attitude of indifference to its claims would occasion no surprise. But if it can be realized that art has a wider meaning—that it satisfies a universal human instinct, the love of beauty; that it records a deliberate choice of the higher aim; that its influence touches almost every department of man's activity; that it is sane, practical, and within reach of all—then surely we are in a position to say that as a nation we can ill afford to neglect the signs of an awakening esthetic conscience.

The art-craft movement and its effect upon domestic design, recent public and private architecture, increased attention to the cultivation of gardens, the creation of municipal art commissions, their care for the details of civic beauty, no less than their advocacy of more fundamental improvements, and public protests against landscape disfigurement, all show a forward step in the advance of good taste, and good taste is a phrase which, for our purpose, might almost take the place of the vague word "art."

The National Academy of Art, which was established by authority of Congress in 1892, and is therefore one of the very few societies possessing the direct indorsement of the United States government, recently decided that the time was ripe for a federation of the art forces of this country, and thru its Board of Regents issued a call for an art convention, which was held in Washington, May 11 to 13 of the present year. At this gathering, attended by representatives of the societies, museums, schools, and civic organizations of the country, and addressed by statesmen, artists, and educators of national reputation, the project took definite form, and, under the name of the American Federation of Arts, became an effective reality. At this point, I cannot do better than quote Senator Root's outline of its plans:

1. To encourage the establishment of art schools, the exhibition of collections of private galleries, and to encourage American artists.
2. To secure higher recognition of art in public schools, and to make boards of education, faculties, and college presidents pay more attention to cultivating the taste of the students.
3. To encourage the appointment of a commission to supervise public architecture.
4. To improve the standard of private architecture.
5. To support the plan of the Park Commission to beautify the city of Washington.

6. To extend the system of national parks and forests thruout the country.
7. To promote public playgrounds and school gardens.
8. To support a movement to enlarge the jurisdiction of the Supervising Architect of the Treasury, so that in effect a Bureau of Arts would be created, and to appoint an advisory committee of experts.
9. To support a National Gallery of Art.
10. To assist in securing an appropriate building for the National Gallery of Art.
11. To effect an organization thru which the general opinion of Americans on art subjects may have an outlet.

This summary was accepted as a general indication of the purposes of the Federation, but not as limiting its activities. A constitution was adopted, and officers were elected. It is unnecessary to read this document in full, but I will call your attention to some of its important points. It provides for the association in membership of any existing organization or institution interested in the objects of the Federation, and for its admission as a chapter. It also provides for personal membership at a nominal fee of two dollars a year. It provides for standing committees on architecture, sculpture, painting, landscape, craftsmanship, art museums and galleries, education, exhibitions, publication, municipal art commissions, village planning and improvement, free art, government art, legislation, and other matters.

It designates Washington as the headquarters of the Federation, in order to emphasize its national character; and the Board of Directors, consisting of the President and Secretary, *ex-officio*, and nineteen members elected from the membership of the different chapters, is expected to be fairly representative of the various sections and interests of the whole country.

Altho but a short time has elapsed since its creation, the American Federation of Arts has made unexpected progress in practical work. The constitution has been printed, and copies sent with letters to about four hundred organizations, asking them to become chapters, and to about four thousand painters, sculptors, architects, and others, asking them to become associate members.

The proceedings of the convention are now in the press, and an edition of five hundred copies will shortly be ready for distribution. Arrangements have been made to issue to members a bulletin which will be published in Washington on the 15th of each month. It will contain:

1. Reviews of current exhibitions.
2. Short articles on municipal art and architecture, treating only of what is being done.
3. A museum department, comprising one scholarly article and news notes.
4. A school department.
5. Schedule of exhibitions.
6. Book reviews, etc.
7. Editorials, "The Voice."

Reading between the lines, we seem to catch something of the intentions of those who are responsible for the conduct of this enterprise. Its keynote

is fraternal work in the field of art, which, properly understood, should be coextensive with human life.

It suggests no pleasant occupation for leisure hours, no selfish enjoyment of surplus wealth, but a healthy outlook upon the world around us and a determination to do its work with some regard for a higher end than the profit it shall bring.

I will enter upon no personal details, but my sketch would be incomplete if it contained no reference to the leaders of this movement. They are men whose professional reputation is a guarantee both of sincerity and ability. Their faith in the artistic resources of their country should meet with a ready response from those in whose power it lies to justify their action.

The United States Commissioner of Education, Elmer Ellsworth Brown, who has more than once addressed this Convention, was among the speakers at the Washington Art Convention, and his cordial approval is a fact that merits your serious consideration.

I make a deliberate appeal to you, who represent an important professional class, to give your personal support to the American Federation of Arts. Some of you may become active workers in a movement which I believe will mark an epoch in the history of American art.

I will only add, as a matter of convenience to any who wish to make further investigation, the names of the officers of the American Federation of Arts:

President, CHARLES L. HUTCHINSON, Chicago.

Vice-Presidents, HERBERT ADAMS, New York; JOHN W. ALEXANDER, New York; RALPH ADAMS CRAM, Boston.

Secretary, F. D. MILLET, New York.

Assistant Secretary, LEILA MECHLIN, Washington, D. C.

Acting Treasurer, A. J. PARSONS, Washington, D. C.

Address all business communications to the Assistant Secretary, Leila Mechlin, 1741 New York Ave., Washington, D. C.

DEPARTMENT OF MUSIC EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—FRANCES E. CLARK, supervisor of music, Public Schools, Milwaukee, Wis.

Vice-President—CHARLES I. RICE, supervisor of music, Public Schools, Worcester, Mass.

Secretary—ELSIE M. SHAW, supervisor of music Public Schools, St. Paul, Minn.

FIRST SESSION.—WEDNESDAY MORNING, JULY 7, 1909

The meeting was called to order in the Trinity Methodist Episcopal Church at 9:30 by the President, Mrs. Frances E. Clark, Milwaukee, Wis., with about one thousand in attendance.

The program opened with organ numbers, played by Frank A. McCarrell, Denver, Colo.

a) "Pilgrims' Chorus" from Tannhauser (*Wagner*);

b) "Communion" (*Batiste*).

These organ numbers were followed by songs sung by Mrs. Ferne Whiteman Smith, Denver, Colo.

a) "I Hid My Love" (*d'Hardelot*);

b) "Thou Art so like a Flower;" (*Burnham*);

c) "A Wee Bit Shy."

The address of welcome was given by Fred Wright, Denver, and responded to by Charles I. Rice, Worcester, Mass.

Mrs. Frances E. Clark gave the President's annual address, her subject being, "The Status of Music in the United States."

Mrs. Jessie L. Gaynor gave an informal talk on "Music in Germany," recounting some of her observations of music in the schools of Berlin.

Under the direction of Wilberforce J. Whiteman, supervisor of music, Public Schools, Denver, The Teachers' Club sang the following part songs for ladies' voices:

a) "Twilight Dreams" (*Gillett-Hoursley*);

b) "Queen of Night" (*Smart*).

A paper on "Music on an Accredited Basis in Universities" was read by Charles Farnsworth, Director of Music, Teachers College, Columbia University, New York City.

Will Grant Chambers, professor of education, University of Pittsburgh, Pittsburg, Pa., read a paper on "Modern Psychology and Music Study."

The following Committee on Nominations was appointed by the President:

Miss Carmichael, Ohio

W. J. Whiteman, Colo.

A. J. Gantvoort, Ohio

A. J. Gantvoort, chairman of the Committee on National Songs, stated that the work he had to submit was practically his own individual report, as he, Miss Shawe, and Mr. McConothly (the three members of the committee) had not agreed. Arrangements of "America," "Star Spangled Banner," "Hail Columbia," and "O Columbia, the Gem of the Ocean"—the versions favored by the chairman of the committee—were then played by him on the piano, for the active members present to pass judgment upon; after the hearing of the songs, the following motion was made by Mr. Kinnear, seconded, discussed, and carried:

Resolved, That the present Committee on National Songs be continued and enlarged to seven members, with instructions to consider the question more fully and agree

upon forms of melodies and arrangements of the same, which shall be printed and sent to the members of the Music Department of the National Education Association at least three months before the next annual meeting.

Miss Elsie M. Shawe, of St. Paul, then moved that the Department of Music Education prepare a resolution to be presented to the Committee on Resolutions of the General Sessions of the National Education Association, urging their indorsement and financial support of the efforts of the Department of Music Education to edit a uniform version of our national songs. The motion was seconded by Mr. Congdon and carried.

The President appointed the following Committee to draw up the resolution at once: A. J. Gantvoort, Miss Elsie M. Shawe, and Charles Farnsworth. On the return of the committee the following resolution was presented by A. J. Gantvoort, chairman:

"WHEREAS, The Department of Music Education of the National Education Association has been considering the advisability of having a uniform version, both text and music, of our national songs, and has arrangements of some of these songs to submit; therefore be it

Resolved, That the general body of the National Education Association indorse the movement and appropriate the sum of \$200 for further work along this line to be done by the Department of Music Education of the Association.

On motion the resolution was sent at once to the General Committee on Resolutions. A motion for adjournment was made and carried.

ROUND-TABLE SESSION.—THURSDAY MORNING, JULY 8

The department met at 9:30 in the Sunday-School Room of the Trinity Methodist Episcopal Church with about four hundred and fifty in attendance.

The topic for discussion was "The Conservation and Development of the Child Voice." Mr. W. J. Whiteman gave a talk on the subject, and his remarks were illustrated by the singing of a third-grade class of children from the Dependent School under the direction of W. J. Whiteman. This was followed by songs from Leslie Burr, baritone, Mrs. F. W. Smyth, contralto, and Mrs. W. J. Whiteman, contralto, all of Denver, Colo.

Charles I. Rice read a paper on "Terminology Reform" and then the Report of the Committee on Terminology was taken up for discussion and adoption.

The lateness of the hour not permitting the full report to be discussed at this session, the President announced that the report would be further discussed at the session to be held in the afternoon of the next day, and, upon motion, meeting adjourned.

THIRD SESSION.—FRIDAY AFTERNOON, JULY 9

The session opened with organ solos by F. A. McCarrell:

a) "Offertoire" in D minor (*Batiste*);

b) "Andantino" in D flat (*Lemaire*).

Elmer Ellsworth Brown, commissioner of education, Washington, D. C., read a paper on "Our National Songs."

This was followed by a paper by John R. Kirk, president of the Normal School, Kirksville, Mo., on "Music on an Accredited Basis in Normal Schools," and an informal talk on the same subject by Charles Fullerton, professor of vocal music in the State Normal School, Cedar Falls, Iowa.

A song entitled "Fairy Love Song" by Willeby was sung by Mrs. M. Armstrong.

The Report of the Committee on Terminology was next taken up, and most of the report was fully discussed and partly adopted.

A motion was made by Charles Farnsworth and seconded by A. J. Gantvoort that the motion to increase the Committee on National Songs to seven members be reconsidered. The motion was carried.

A. J. Gantvoort then moved that the Committee on National Songs be increased to ten members and that Mrs. Frances E. Clark be one of the members of the committee,

the other members to be named by the President. The motion was seconded and carried. The President announced the following Committee on National Songs:

A. J. Gantvoort, Cincinnati, Ohio; Miss Elsie M. Shawe, St. Paul, Minn.; Osbourne McConoth, Chelsea, Mass.; R. G. Cole; Thomas Tapper, New York; Mrs. Jessie L. Gaynor; E. B. Birge, Indianapolis, Ind.; Mrs. C. B. Kelsey, Grand Rapids, Mich.; Charles Farnsworth, New York; Mrs. Frances E. Clark, Milwaukee, Wis.

The secretary was on motion instructed to write P. C. Hayden, editor and publisher of *School Music*, that the Music Section of the National Education Association desired to express their full appreciation of the valuable aid of his journal in bringing the papers and discussions of the Annual Meeting to the knowledge of the readers of *School Music*.

A. J. Gantvoort then moved that the Committee on National Songs be instructed to report to the General Body of the National Education Association the work to be done by the committee during the coming year, and prior to the next Annual Meeting, in case the committee is called upon for such a report; motion seconded and carried.

A motion was made by A. J. Gantvoort that the retiring officers be extended a vote of thanks for their valuable services in arranging the program for this meeting. Seconded and carried.

The Nominating Committee submitted the following report:

For *President*—Charles I. Rice, Worcester, Mass.

For *Vice-President*—Miss Elsie M. Shawe, St. Paul, Minn.

For *Secretary*, Miss B. Alexander, Dallas, Tex.

It was voted to instruct the secretary to cast a ballot for these nominees. The nominees were then declared elected and the meeting adjourned.

ELSIE M. SHAWE, *Secretary*

PAPERS AND DISCUSSIONS

THE STATUS OF MUSIC IN THE UNITED STATES

MRS. FRANCES E. CLARK, SUPERVISOR OF MUSIC, PUBLIC SCHOOLS,
MILWAUKEE, WIS.

To answer the query suggested in my topic would require the mind of a seer. Music is just now in such a transitional state that it is difficult to determine where we stand. We are doing things musically so rapidly and in so many ways and places, that it is next to impossible to get anything like a true perspective.

Comparisons are not always odious; but to compare music here with that of Europe, without taking into consideration the conditions and history of the matter, is quite certain to be obnoxious to the true American. We are constantly being told that we have no music here, and, perhaps, in some sense "tis true, and pity 'tis, 'tis true." If, however, we think for a single moment of the youth of even our oldest musical activities and institutions, we are amazed and overwhelmed by the prodigious growth in all lines of music. Four hundred years of active national assistance and encouragement ought to have done something noteworthy in Germany, France, Italy, and Austria. In

Europe, centuries have been given to the rise and development of schools of music, encouragement of performance, composition, opera, and every form of musical activity

America had only just been discovered when Palestrina wrote his music for the church service and Martin Luther invented the choral. Our Pilgrim Fathers were only just immortalizing Plymouth Rock and struggling for an existence in an unknown world, when opera and oratorio were delighting the people of Italy and the civilized world with those newly discovered possibilities of music. These same Puritans were so imbued with the idea of separation from the forms of the oppressing church that music was nearly lost to us for two hundred years.

While Bach and Handel in the early years of the eighteenth century set all Europe atingle with the wonders of their genius, our sturdy ancestors were fighting Indians and bickering with England for charters, taxes, trade, and a right to exist. The same year that gave to the old world that matchless genius, Haydn, gave to us Washington, the surveyor of unbroken Virginia forests, the Indian fighter in the wilds of Pennsylvania who, in the providence of God, later welded the scattered colonies into a nation.

While educational interests were looked after in those early days in the founding of colleges, and later the development of our splendid system of public schools, music was left in its swaddling clothes. A few attempts to institute singing societies and the rise of the old-fashioned singing school were the only manifestations of musical life outside the desultory teaching in a few schools for girls. In Europe, Mendelssohn and Beethoven; here, our first society. Over there, every child brought up on Haydn and Mozart, French and German opera, and the oratorio; here, our highest achievement a Watts's hymn to Old Hundred, Boylston, or Hamburg, pitched with a tuning-fork, sung waveringly, but none the less devoutly, by our pioneers of the great Middle West, often led by the circuit riding preacher, whose superhuman efforts kept our frontiers from total depravity. In Europe in the middle of the last century, Schubert, Schumann, Chopin, and Liszt; here, opening the waterways; building roads; developing commerce; making states; acquiring territory by buying or battle; breaking up great prairies and clearing virgin forests; making homes for the millions that came to us; building the great railroads, that in time made possible the building of great cities. Later our strong, progressive men were conquering the forces of these awful mountain fastnesses, bridging the chasms, tunneling the skyward peaks, and overleaping every obstacle of plains and mountains, deserts and streams, uniting the different portions of this marvelous young empire. God, in his wisdom, lined these hills with gold—gold in such abundance that no potentate ever dreamed of such richness. Was there no purpose that this untold wealth should have been placed here and not in the hills of Rome?—here in this naked, crude, and brutal wilderness instead of in the Alps or the Apennines? Had the fever of '49 not seized upon the chivalry of our land, we might have

had more time for culture; but in the working-out of the Divine plan, that was the time for laying the foundations of those great fortunes that should, by investment in gigantic enterprises, bring us to a position of importance in the world of nations.

Then came our grief of internal strife and struggle in the Civil War, which, while the intensity of feeling brought forth heart songs of a noble and lasting character, lost for us for another ten years any marked musical activities. It is startling to remember that it was not until 1867, that great year of beginning, that we had a music school in this country. In that year Tourjee founded the New England Conservatory, Eichberg, the Boston Conservatory, Ziegfeld, the Chicago College of Music, and Miss Baer, the Cincinnati Conservatory, while Europe was reveling in the piano-playing of Liszt, Rubenstein, Tausig, and Von Bülow, going to hear the wonderful epoch-making operas of Wagner, and wondering as to the future of young Brahms and Dvorak and Grieg.

With this picture before us, why should we blush because we have not yet produced a great composer or because we have not opera in every large city, nor so many orchestras, nor perhaps so great a galaxy of virtuosi. Rather ought we to take courage and increase our faith. What wonders have been wrought in this miracle land of push and power! In forty years we have accomplished what it would have taken, nay, did take, any other nation two hundred years to do. In the next ten years, with the present condition of growth, we shall be competing for, if not usurping, first place. We have now our great orchestras—not enough of them as yet. We have our seasons of opera, all too short, and great concerts. Music schools spring up like mushrooms, and are doing good work, most of them. Our teachers are gaining prestige at home and abroad. Music is on a firm basis in the public schools, without doubt doing the most comprehensive work with children being done anywhere. We are sending the finest voices in the world to the workshops of Europe, and we have only just begun. As good or better teaching is being done here as in any place in the world, and vastly more of it. Mr. Adolph Weidig writes in the *Leader* that he finds the work done here much superior to much being done in the studios of Berlin and Vienna. One writer says there are ten thousand music students in Boston alone, and New York and Chicago could probably duplicate or exceed that number. Our Bispham talks of a theater in New York for American composition, or at least opera singing in English. We have yet much to learn from the old world. How can we even hope to have an American music if we do not use what we have? In France, the children sing mostly the French songs; in Germany, the folk song and chorals; in England, the glees, ballads, and madrigals; in Norway, the songs of the Norseland. Here, our material for school singing has been largely drawn from the German, giving scant attention to the French, the Italian, or the representative works of our best composers. We are still stumbling like a child learning to walk in the matter of what shall constitute the daily bread of the American child or the child become American.

Our Sousa marches or Victor Herbert lifts may not be classic, but they are at least distinctly American. Our old plantation songs, according to action taken by the Colored Woman's Federated Clubs the other day, are to be revived and restored, and they too are American. There is a germ of beauty and real Americanism in the better class of our popular songs, and while the greater portion of them are ephemeral and weak, there still remains the fact that they have caught the swing and go and bustle of American life as no other form has done, and this fact must be reckoned with in the future.

Many of our best composers have done already splendid things—things that will live, songs that breathe of our own soil at its best. Mrs. Gaynor's matchless songs of the child world should be, and are, sung from coast to coast, and so, too, should be the part songs of Gilchrist, Nevin, Loomis, Chadwick, and a dozen others. Henry Hadley carried off the \$1,000 prize for a symphony the other day at the Grand Rapids meeting of the Federated Clubs, and Arthur Shepherd \$500 for a piano composition and \$500 for a song.

What are we doing in colleges and universities? From a bulletin sent out by the Bureau of Education, we learn that in 1907 a list of questions concerning music was sent out to a number of colleges and universities and schools of music in various parts of the country, but mostly in New England. 1,088 replies were received. 112 colleges, normal schools, and universities reported no music department. Of the 595 schools reporting, there is a wide range of work covered. Some refer only to professional training, some only to orchestra and glee-club work, some to extended courses in harmony and counterpoint, and still others only the chorus work. As to the granting of credits for entrance or in the college course, 123 replies were received from leading colleges and universities. 58 do not maintain music departments. Of the remaining, 65 give credits for the study of music, either at entrance or during the course, leading to a degree, or both. Notably among those who do both are Amherst, Columbia, Cornell, Harvard, Oberlin, and Smith. Among those that grant credit toward a degree are the Universities of Arkansas, Colorado, Illinois, Iowa, Michigan, Minnesota, Missouri, Wisconsin, Kansas, Idaho, Nebraska, Oregon, and Oklahoma, and Yale, Vassar, Wellesley, and some other colleges.

Mr. Manchester, the author of the *Bulletin*, well says that music needs the college atmosphere, the spirit of culture, and the application to its methods of the system and orderliness that characterize college work. He might have stated also the converse—that the college needs the music for its culture and harmonizing influence. He also remarks that “a well-defined, properly regulated development of music education, from its most elementary to its highest grades, does not yet exist.” There is just where our work lies ready for us. We have no uniform gradation in the grades, absolutely none in our high schools, no connection or relation with the college, and still less, if that were possible, with the conservatory.

No statistics are as yet available to give us the number of public schools in which music is regularly taught, but the percentage of city and graded

schools including music in the curriculum must be, I think, very large. Almost every town has it in the grades, but our weakness is in the absence of any sort of proper teaching of music in the high schools and the proper grading of the work. Much of the good work done in the elementary schools has been allowed to lapse and lose itself in the jungle of the higher schools. Here we fail utterly to co-ordinate our grade work with the courses offered or proposed in our colleges, or with the work of the music school or conservatory. We overlap and leave gaps all along the way. If we could only carry our note-reading thru the eight grades, with proper attention to tone and song interpretation; then four years in high-school work in choruses of the best order, short lessons in musical history, elementary harmony, and courses in music appreciation, by help of the mechanical player, school orchestra, and glee clubs, giving an occasional composer's day, and other programs; then on for four years more in college, completing these courses and adding piano or voice or orchestral instrument, theory, and composition, we might hope to achieve some sort of national recognition and perhaps the dream of a national school under the government.

Why should we make such a hodge-podge of the whole thing, teaching composition and interpretation in the primary grades and the elements of notation in the normal school? If we could have music on an accredited basis in every high school, we could send pupils to our normal schools and teachers' training schools equipped and letter-perfect in the academic work required. Then in two years of training in methods of teaching, psychology, and child study, we *might* hope to have in the next generation a supply of grade teachers, musical, music-loving, and able to inspire, and instruct, and educate the grade child by means of knowing how to use this powerful lever. As it is, the normal schools are struggling along, trying to turn out a finished product in the course of ten or twenty weeks with raw material.

Were it not for the indomitable pluck of the average American girl, who somehow finds herself anyhow, the result would be more dismal than it is.

Another serious handicap lies in the fact that so many of our supervisors find it possible to attend, for preparation, only a conservatory or music school without connection with a literary institution, and so come into the work without sufficient education. Every school engaged in training supervisors should have at least a reciprocal connection with some school or college where literary work might be had, as well as a strong training department in methods of teaching public-school music.

Another suggestion, which may be pertinent, is that the time has come for us school-music people to come out of our shells and meet half-way the advances (somewhat tardy, I must admit) of our music profession. The Music Teachers National Association has a very live public-school section, which has done much research work and work looking toward the better co-ordination of the schools with the professional teaching. The National Federation of Woman's Clubs gave an entire session to public-school music, seeking to know how to help.

The latest manifestation of the increased interest in our work is the placing of children's choruses on the great programs of jubilees, etc. The Cincinnati Festival has achieved distinction in this line; Milwaukee this year gave Pierne's "Children's Crusade," as did also Rochester, N. Y. In New York City only the other day they gave a concert with a chorus of 3,500 grade children, 1,500 high-school pupils, and Madame Schuman-Heink. Every music journal and bulletin has programs of concerts given wholly or in part by children's choruses in almost every state in the Union.

Music in America has only just begun. Where or how it shall reach its climax does not yet appear, but the forces at work here will surely produce results in music as in everything else.

We are unlike any other nation on earth, made up not of one race, one language, or one religion, but a fusion of all the races of the Old World. They have come to us, these millions, from everywhere, bringing with them their love of liberty, their hatred of oppression, their arts and loves and ambitions, and tumbled them all into the mighty "melting pot" of our American life. Who is the present-day American? A few years ago we would have said, "One in whose veins flows the blue blood of the Puritans, or the aristocratic 'Vans' of New York, or the Cavaliers of the South." The great throbbing heart of this new world has taken unto itself Irish and Scotch, German and Russian, Italian and French, Austrian, Bohemian, Slav, and Norseman—all leaving behind the traditional allegiance of the past, and proudly taking a stand under the protecting folds of "Old Glory." What then are to be the characteristics of the American music of the future? Not any one of these nationalities, but a new birth, a new life, a new song, brought forth out of the heat and stress, the peace and love, the brotherhood of the great forces here in the "melting pot" of the world.

Our composer of the future, and he is coming, many of him, as sure as the world moves, is just as likely to be the child of a Russian Jew or a Pole, fleeing from oppression to this land of opportunity, or a Bohemian or Slavonian from the slums of New York. One thing only is sure, the music must be *American*, breathing out the freedom, the breadth, the strength, power, and sweetness of our American life at its best; not the multi-millionaire few who sometimes represent us; not the ignorant, uncultured; not the slum element, but the clean, honest, fun-loving, self-respecting American. It was necessary at first to develop the country, to dig and delve, to shape and mold our government, to prepare for the service God has given to this people to do in the evolution of the world; but *now* we have stability, and place, and money—too much of it in some places—to do the great things in a new creation of art life, of musical art. We shall not always be grasping and wholly utilitarian.

We school people have the task before us to work out these higher ideals, a higher conception of living, thru the children in our care. We must ever remember that it is our province to educate the whole people, not to do this or that thing for bread alone, but to live, to enjoy, to be an honest man or

woman, a helpful personality in the community in which we live, not to make a musician of this or that child, but to make a nation of music-lovers. The geniuses of the future will find themselves only in an atmosphere of universal appreciation and love of music, and that can come only thru our efforts to use music as a great educational force in the development of the race. In no other way can the art life of America be made indigenous to the soil and really effective.

Into the "melting pot" has been poured the art-loving blood of the world. Ours the task to blend the diverse characteristics; to foster the love of all art, and musical art in particular; to demand intelligent, educational work everywhere; to rise above petty quibblings; to stand for a broader recognition of the power of music as an educational factor; to do our share in furthering musical activities in every line, and finally to believe in, to love, and to defend the musical future of our own America.

MUSIC ON AN ACCREDITED BASIS IN COLLEGES AND UNIVERSITIES

CHARLES HUBERT FARNSWORTH, ADJUNCT PROFESSOR OF MUSIC, TEACHERS COLLEGE, COLUMBIA UNIVERSITY, NEW YORK CITY

In the following paper the subject, "Music on an Accredited Basis in Colleges and Universities," will be considered in four main topics. First, some recent statistics as to the granting of credits by colleges, both as to entrance and leading to degrees; second, what accrediting means; third, what accrediting in music should aim to accomplish; fourth, practical suggestions.

With reference to the first of these, the movement for the recognition of music in the higher institutions of learning is rapidly growing. The following statistics are taken from an inquiry conducted by Professor McWhood of Columbia University, and published February, 1908.

There are now sixteen colleges that grant credit for music both at entrance and for the degree of A. B. or its equivalent. Three grant entrance credit but no credit toward the degree. Thirty-nine grant credit in music toward the degree but not for entrance. In all fifty-eight colleges, out of one hundred and twenty-three that replied to the questions sent to them, recognize music.

These figures, as Professor McWhood says, are more significant when the fact is considered that one-half the colleges that now grant credit in music toward the degree have adopted this policy within a period of six years, two-fifths of them within four years, and the majority of the colleges that now grant entrance credit in music have taken this step within a period of three years. If progress has been at the same ratio, figures collected at the present time would be much larger.

According to Professor McWhood's pamphlet, the colleges that grant

credit, both at entrance and toward the degree, are: Amherst, Barnard, Beloit, College of St. Angela, Colorado, Columbia University, Cornell University, Harvard University, Oberlin, Radcliffe, Smith, State College of Washington, Syracuse University, Tufts, Westminster, and Wilson. Those that give credit toward the degree only are: The Universities of Arkansas, Colorado, Idaho, Illinois, Iowa, Kansas, Michigan, Minnesota, Missouri (probably), Nebraska, Oklahoma, Oregon, South Dakota, Washington, West Virginia, and Wisconsin, Dartmouth, Mount Holyoke, Northwestern University, University of Nashville, Vassar, Wellesley, Yale University. It will be seen that these lists are fairly representative.

With the tendency to accredit music growing so rapidly, it would be well to consider what accrediting, our second topic, means. To accredit a subject really means that a unit of measurement has been established with reference to both the work and its value in relation to the other subjects of the curriculum, so that a person unfamiliar with music, hearing that a music course was given two points' or hours' credit, would have some idea of the work that would be required. To establish such a unit of work it is not only necessary that the subject should be capable of being measured, but that the conditions under which the measurement is conducted shall be similar and that tests shall be given by competent persons.

That such a standard of work forms a very valuable part of educational machinery will not be doubted. It proves of great value to subjects that lend themselves to such measurement. It makes it possible for the applicant for work to get recognition for what he has done. It gives an institution whose courses come up to the standard recognized a very attractive asset for serious-minded students. It gives to students an external stimulus over and above the interest of the subject itself. They need but to get a statement from a responsible institution that certain points have been gained to get instant recognition. On the other hand, this effective educational device does not work equally well with all studies. In those subjects requiring reproduction of what has been learned, whether as in language and history work depending upon pure memory, or in much of the science work where the problems given are to reproduce a process of reasoning or a formula already given, one can see that the accrediting system would work fairly satisfactorily. But if, with the external facts gained, the subject implied the personal reaction toward them, requiring the exercise of taste and judgment and the power to value ethical or aesthetic ideals, a serious difficulty enters, for how are such subjects to be adequately measured?

Not on the vulgar mass
Called "work" must sentence pass,
Things done, that took the eye and had the price;

O'er which from level stand,
The low world laid its hand
Found straightway to its mind, could value in a trice:

But all, the world's coarse thumb
And finger failed to plumb,
So passed in making up the main account.

Thoughts hardly to be packed
Into a narrow act,
Fancies that broke through language and escaped.

What has happened to the subject of English literature with reference to college entrance is a good illustration of this point. What the framers of the requirement wished was a genuine appreciation of literature. This means an aesthetic approach. What the requirement actually turns out to be, under the necessity of standardization implying measurement, is the science of literature, the history of literature, the archaeology of literature, in fact, everything except the thing really wanted—that appreciation of literature that means love and admiration.

Keeping in mind that accrediting is an extremely valuable piece of educational machinery, and at the same time that it does not work equally well for all subjects, let us consider the third topic: what accrediting in music should aim to accomplish.

There can be little doubt that the kind of activity that is stimulated in our colleges develops a purely intellectual approach, that of cause and effect, rather than the approach which is based on feeling and which manifests itself as like or dislike, that is, taste or preference with reference to the conditions of our environment, and which covers such spheres of human activity as lie under the domain of ethics and aesthetics. It is true that in ethics and aesthetics we constantly give reasons for our likes and dislikes, but close observation soon shows, wherever the ethical or aesthetic reaction is genuine, that the reason is the fruit of the feeling rather than the feeling the product of the reason. Man is an animal so pleased with his new acquirement of reason that he is inclined to give it credit for all that he does, rather than to admit that he does anything for which he cannot give a reason.

If this is a true picture of the trend of college work, it would seem that a well-rounded system of education would demand that aesthetic subjects should emphasize pre-eminently the feeling approach to the beautiful. That is to say, we should consider the beautiful primarily with reference to like or dislike, not from its psychological, scientific, archaeological, or even historical aspects. We should give genuine experience of the beautiful preference over comment or study about it. It is obvious that knowledge and skill both to stimulate and sustain such feeling is necessary, but these should be treated as means rather than as ends in themselves, as they very justly might in a technical school training for professional work.

Let me preface the last topic, "Some Practical Suggestions," by facts showing the kind of music study colleges at present prefer.

In the pamphlet from which I have already quoted there is a grouping of institutions according to the subjects in which musical credit is given.

BRANCHES IN WHICH CREDIT IS ALLOWED	NUMBER OF INSTITUTIONS ALLOWING CREDIT	
	At Entrance	Toward the Degree
Musical Appreciation (including History of Music).....	9	42
Harmony.....	18	47
Counterpoint (including Fugue, etc.).....	9	33
Composition (including Form, etc.).....	0	18
Practical Music (Performance).....	10	21

If we add together the subjects implying the study of the grammar of music, we get a total of 98 toward the degree and 27 for entrance, while appreciation, including history, has but 42 toward the degree and 9 for entrance.

It will be seen that there is a decided preference for the bookish work which is capable of being handled along lines with which college authorities are familiar. It is natural that this should be so, not merely because the grammar of music lends itself to measurement, but also because of college traditions.

Still, use of the accrediting system for work whose importance is in the ethical or aesthetic bearing of the studies is already familiar to the college world. Many of the so-called "snap" courses at our great universities are a recognition of the fact that while the value that was to be obtained from the subject could not be measured by examination papers, it was still worth while to have it offered because of the subtle influence of the subject, or the man, or generally of both combined. This means that while the measuring side of the accrediting system breaks down with reference to these studies, the benefit of the accrediting system in giving value to the work and recognition and a standing is worth while, even tho many of the students are unable to get this cultural benefit and can easily abuse the privilege which gives rise to the term "snap" course.

Besides non-musical courses, there is plenty of precedence among institutions of good standing in connection with musical courses. In the reply from Amherst we find that for four semesters' work for chorus and orchestra, one semester credit is given, and that out of 450 or 500 students, from 70 to 80 avail themselves of the privilege. This means that the institution is willing to grant its credit for work, not because it lends itself to exact measurement of ordinary credit work, but because the work itself is valuable and needs the encouragement and stimulation that the credit system gives it. Leaders of college choruses and orchestras know what this means with reference to the work done. The purely voluntary organizations start out very well at the first of the year, but as soon as the pressure of work commences their ranks become decimated.

Another difficulty is that, in order to make the work attractive, compositions that will attract audiences have to be studied. They have to be learned for public performance. While this is an excellent incentive and some of it

should be done, the really musical value of the exercise would be greatly heightened if, instead of depending on what we might call "gate-receipts" for sufficient attraction to keep students in organizations, the conductor could offer a certain amount of credit, could drop students who did not attend regularly, could give low marks to those who did not do good work. He would be free then not only from constantly preparing work for exhibition, but to try works which are of value to the students from the side of the literature, but which either from their nature or from the conditions under which they are being studied ought not to be attempted in public. Thus the accrediting system would free the leader and give him opportunity to utilize the music that would be of highest value toward developing musical appreciation in the students. The work should require at least two meetings a week and should be followed up with such serious earnestness that real acquaintance with the masterpieces would be possible. When done in this way, the lack of all the instruments for orchestral organization, or the complete balancing of choruses does not become so vital as when the only incentive that keeps the organization together is a public performance. With such actual contact with music there must necessarily be considerable literary work in the line of history and biography and the nature of the forms studied. Such work will take its significance entirely from the practical work in music-making. The conditions for entering organizations should be sufficient talent and knowledge along the lines of voice or instrument to be of value to the organization. One who has conducted such organizations realizes how low this may be for the individual and yet be of worth to the organization, if faithful attendance and serious application can be secured.

So much for music-making thru organization. Credit should also be given for individual music-making, whether with voice or instrument, if what is done is really interpretative and not merely the development of technique. One does not need to be an advanced player or singer to give an artistic expression to a simple song or piano number. A certain modicum of technical knowledge is essential. With this, if the student is ready to take pieces well within his technical capacity (instead of learning a few for some concert performances), and to be guided by his teacher thru a sufficiently broad selection of numbers, so that he can get some notion of the style of the composer, the nature of the form, the poetry in the works, he is certainly getting valuable aesthetic experience and should be entitled to credit. I fully realize that there are not many instrumental teachers in connection with our colleges that would be willing to do such work. The force of the modern tendency to exhibit virtuosity tends to overemphasize the playing of difficult pieces and to lose sight of true interpretation of works that are fairly easy to perform, but which make a serious demand upon poetic interpretation.

From the point of view of musical cultivation, the work done in actual music-making, whether collectively or individually, is of greater value than when the music is made for the individual, yet the ingenuity of the modern

inventor has placed at the disposal of those who cannot play or sing the possibility of reproducing the work of others in a way that opens up a very wide field for aesthetic cultivation. Harvard has a room with a player-piano and organ where students can get direct acquaintance with musical works. There is no doubt that a very large percentage of students can by this means carry on valuable music study from the point of view of developing taste and love for the subject. What was said in connection with the collective study of music in reference to its history, biography, and form is just as applicable to the individual interpretative work or the work done by instruments. In fact, while making and listening to music is the way to cultivate it, we can hardly recognize such work in a college institution unless it is accompanied by the knowledge about music that can be obtained from books and lectures. I take it for granted that courses in the grammar of music will be recognized. They should be limited to exceptional students who have talent sufficient to utilize the knowledge they get and they should have the credit that they deserve. Such courses do not offer the problem that we have to meet. They do not supply the real musical nourishment that the bulk of the students require, nor are they difficult to accredit. The emphasis I am making is for those courses that will be of real value musically to the majority of the students, and which are at the same time difficult to fit into the accrediting system of our colleges. The courses I am advocating are much more vital to the real musical cultivation of the community and need the serious consideration of those who manage college affairs as well as those who do the teaching. The accrediting of this practical work on the basis of laboratory work, with the incidental outside reading, does not seem unjust if the college authorities could be brought to see it in the light of its real value to the student, the institution, and the community, and if music teachers could conduct the work not from a technical point of view, but putting the emphasis on interpretative thought. Under these conditions the musical life of the colleges could be greatly increased and the benefit to the community and the individual extended way beyond the present narrow limits.

To sum up, owing to the great value of aesthetic study in our educational system and because music among all the arts is the best fitted to supply the true feeling approach to the subject, it is worth while for colleges, in order to stimulate wider musical experience, to grant the benefit of college credits to courses in music that would bring the student into vital connection with the subject itself, whether this be in collective organizations, such as choruses and orchestras, or individually with voice or instrument, or done by mechanical means for producing music. But while in these courses the emphasis is placed on the hearing of music, they should be accompanied by literary study that shall give the utmost significance to what is heard. In brief, my position is, that instead of emphasizing the grammatic and literary subjects as is now done and recognizing music-hearing only as an accessory to these, I would reverse the whole process and emphasize music-hearing, putting the literary

work as accessory in leading to and interpreting what is heard, bearing in mind at the same time that this whole discussion is for the general cultivation of music, and not the technical cultivation, whether in composition or performance of the professional student.

MODERN PSYCHOLOGY AND MUSIC STUDY

WILL GRANT CHAMBERS, PROFESSOR OF EDUCATION, UNIVERSITY OF PITTSBURGH, PITTSBURG, PA.

This paper claims no special authority in its field. It is an attempt to put in writing some rambling suggestions made more than a year ago before the Music Section of the Colorado State Teachers' Association. In its preparation no experiments have been performed and no authorities consulted. It exploits no single system of music instruction and represents no psychological cult. The psychological defects which it aims to criticize and correct were observations made in various schools thru several years, and it has seemed impossible to organize its content in any consistent logical form. Furthermore, it represents the opinions of an educator interested in music, rather than a musician interested in education; and wherever the technical interests of music and education seem to conflict, support is invariably given the latter. Music holds its place in the school curriculum not primarily for the sake of music but for the sake of education.

Music's first service to education is its broadening of the sensory life and its making available a greater supply of the raw material of thought. The 50,000 possible sensations referable to the stimulation of a dozen or more groups of sense organs, and the consequent reactions of corresponding brain centers must be thought of as the ultimate material of all human experience. Other things equal, the individual who is responsive to the largest number of visual sensations will have the richest experience, and the statement is even more true of auditory sensations. What nature study and art and construction accomplish in the development of visual perception, music should accomplish in the auditory field. The greater the number of the tones distinguishable by the human ear an individual is responsive to, the greater are the probabilities of his correctly perceiving and interpreting the world in which he lives. This is by no means an insignificant service of music to education.

For present purposes I distinguish three significant elements in music: (1) tone; (2) rhythm¹; (3) meaning—including both the images and the feelings aroused.

The value of pure tone in the life of childhood has, I feel sure, been too much overlooked. Children love tones for their own sake. Recall the evident satisfaction of the infant droning his monotone in the cradle, the incessant bird calls and cat calls and imitations of the calliope from a group of boys, the enthusiasm of all children for drums and whistles and horns. These are

¹ Genetically, I should put rhythm first.

but signs of the intense tone-hunger which possesses every normal boy and girl. And yet much of our music instruction wholly ignores this love of tones and depends on the wholly unnecessary association of words with tones for interest in the work. In many cases pupils' attention is attracted to the words and away from the tones and their relations, thus defeating the very purpose aimed at by early training in music. Many people have reached maturity without having developed an interest in any kind of music but vocal music, simply because, in the initial stages of their training, attention was given wholly to the words, and the song became simply a means of telling a story. This is especially unfortunate since the story interest is naturally strong and needs no such reinforcement. I do not mean to say that there should be no singing of songs by young children—there should be a great deal of it—but my plea is for a great deal more attention to tones and their relations, for their own sake.

Musicians all realize the genetic antecedence of melody to harmony; single tones arranged in series precede simultaneous groupings of tones. This is due, of course, to the fact that in mental development successive association comes before simultaneous association. Primitive music is largely monotone, and at best a serial arrangement of a few easily distinguished tones. I conclude, therefore, that the vocal training of little children should include, at first, but few tones, and these with large rather than small intervals, that is, 1, 3, 5, rather than 1, 2, 3. As the development of the eye makes possible the distinguishing of spectral colors before shades and tints of the same color, so the development of the auditory function brings about a sensitivity to large intervals before small ones are felt. Indeed all learning proceeds by successive fluctuations between ever-narrowing limits. Chords and accompaniments are to be avoided, because with the child's limited range of attention and limited ability to analyze, they obscure for him the important factor and tend to disperse rather than focalize his mental content.

In rhythm, too, we have one of the most fundamental facts of consciousness. But rhythm is subject to the law of all motor development, that is, that control proceeds from fundamental to accessory movements, from central to peripheral muscles. The rhythms to which small children respond with vigor are simple and well accented. The more complex rhythms involve a type of reaction entirely too highly specialized for motor control of primary pupils. But this principle is frequently overlooked in public-school music. Many children's songs involve a complexity of rhythm which is much beyond their ability to feel. Reference has already been made to the few tones of primitive music; it will also be recalled that savage music, as well as the dance, as a rule, is marked by simple rhythm and vigorous accent. Personally I favor much activity in connection with early music training. The pulses of the music should be felt thruout the entire organism and should be expressed by a vigorous motor response.

What I have designated as meaning, the third of the significant elements

in music, arises when tone and rhythm become associated, thru word or action, with definite images. If a child has been properly trained in the appreciation of and response to tone and rhythm, the transition to meaning is natural and easy. A percept, or any other mental fusion, is more than the sum of its constituent sensations. Its meaning depends on the total organic response to it as a stimulus; and while this response is different from the sum-total of the instinctive responses of its constituent sensations, it could not have been developed but for them. All developed reactions are built upon native instincts. The consciousness accompanying instinctive reactions is vague and dispersed—a mass of feeling almost, if not wholly, devoid of imagery. This mass of feeling, the echoings of racial experience, as it were, is organized into the images, the meanings, the specific values of individual experience by the building of specific reactions out of the native instinctive adjustments. And it is thus that the intelligent meaning of music takes form out of the sensuous pleasantness of tone and rhythm, provided the process is not hastened and aborted by the too early and undue use of word and story. With the instinctive enjoyment of tone and rhythm killed or atrophied, a song can never mean more than the mere story expressed by its words, and instrumental music can have neither meaning nor enjoyment.

This intimate interdependence of motor and mental differentiation also has a bearing on the relationship existing between tonal expression and tonal discrimination. Psychologists assure us that a trained ear can distinguish more than 11,000 different pitches, yet all our music is written by the use of about 90 of these, and the extreme range of vocal music includes less than half of these 90. The limited range of the human vocal apparatus for the expression of tones correspondingly limits the field of accurate discrimination and appreciation of tones and their combinations. Were it not for the fact that pitches beyond the range of one's voice are subjectively represented to him by the kinesthetic sensations due to the vocal production of the corresponding tone in a lower or a higher octave, all instrumental music would necessarily be limited to the range of vocal music. Ability in the discrimination of tones is measured by ability in the expression of those tones. This implies, does it not, not only that the vocal instruction of children should be limited to the few tones which fall easily within the range of their voices, and of sufficiently great intervals to be easily produced and distinguished by them, but also that all music presented for their enjoyment and cultivation should be somewhat limited in range by the same considerations. If sustained pitches beyond the range of his voice are painful to the adult hearer, their use cannot be very educative to the immature child. There is real need for more careful investigations of the natural range of the voices of boys and girls of all ages, and for the systematic rewriting of all children's music in the light of these conclusions.

The "music area," if I may so designate it, in the human cortex, is probably either a part of the speech zone, or occupies a highly specialized area adjacent to the speech zone. Music, like speech, is an expressive function, and its

normal activity involves all the cortical centers involved in the processes of speech. The speech zone includes the hand-motor center, the speech-motor center, the auditory center, and the visual center, all connected with one another and with other cortical centers thru systems of neurones of the most bewildering complexity. The use of the speech-motor and auditory centers in oral speech is obvious. The hand has always been, thru sign and gesture, a most trusted organ of expression, and thru drawing and writing it maintains its important place in persons of culture. When one is involved in a difficulty of expression, as in talking to a foreigner or amid loud noises, he invariably resorts to gesture as the universal language. The eye gained its place in the speech apparatus originally thru its perception of facial expression, bodily attitude, and gesture; but in higher development it retains its place thru the reading of conventional symbols. The higher uses of hand and eye in writing and reading become a part of the speech function late in development.

There is no reason to doubt that this description applies equally well to the development of the music area and function. When hand and eye centers first co-operate with the speech-motor and auditory centers in the special work of the music area, it must be in their lower rather than their higher function—that is to say, in the making and interpreting of related gestures or manual signs. Those, therefore, who favor the use of manual signs in elementary music instruction have a psychological justification, in addition to the many practical advantages. I feel sure that the use of manual signs of some sort in singing is *a*, if not *the*, natural transition to the writing and reading of music by means of conventional written symbols. The mind, thru the eye, has been accustomed to follow and interpret the doings of the hand so long that it is ready with instant recognition for every change. It is common knowledge that a monotone can sometimes be made to distinguish and produce different tones which at first seemed the same, by associating them with different manual signs or other motor adjustments. When their symbols are seen to be different the tones are more easily heard as different. I understand this to mean that the conventional writing and reading of music do not belong naturally in the early years of instruction.

And much the same conclusion may be stated as to technic in general. In spite of years of agitation in educational circles over the necessity of giving attention to content before form, of grasping the reality before attempting a definition, of doing the thing before talking about it, I drop into a music class and find intermediate-grade children defining *andante*, *staccato*, *pianissimo*, *signature*, *allegro*, *cum espressione*, etc., without a vestige of real content for any of the terms; and if, perchance, a little singing is permitted, the pupils follow the score with eyes alert for these danger signals along the route, reminding one of the old-fashioned teaching of elocution, where the appropriate gestures were accommodately indicated in the margin. The idea of controlling expression thru content seems unthought of, and it is well, perhaps, considering the barrenness of content. Too often, formal instruction of this

technical kind has destroyed whatever of inner response the children naturally gave. The soul of music has been sacrificed to the dissection of the body.

And yet, music is a subject which is especially adapted to laboratory methods of instruction. It makes a strong instinctive appeal and is especially rich in sensory content and rhythmic response. It requires no labored correlations to give it interest. Why, then, should a teacher barter such a birth-right for such a miserable mess of pottage as drill on symbols and signs, on definitions and rules, when experience is lacking to give them any real meaning? Why should not the grammar of music grow out of its practice as the grammar of speech grows out of its use?

Finally, just a word regarding the development of appreciation of music. There are many pupils who may not reasonably be expected to become good musicians, but there are few indeed who may not become lovers of good music. And I am by no means sure that this is not, after all, the chief justification for music teaching. The principle of apperception is fundamental here. Provision should be made for an abundance of music, both vocal and instrumental, in all our schools. This music should be the best obtainable, tho I am not one of those who believe that no music is better than poor music. As a rule, music should be carefully selected, as much with reference to range of the children's voices as that of the singer, and with reference also to the rhythm and the content which will call out a quick and strong response from the children. If we are to provide for the development of the sentiments, as well as of intellect and motor skill, there is no more certain method than providing an environment rich in music and song.

REPORT OF COMMITTEE ON TERMINOLOGY

CHARLES I. RICE, DIRECTOR OF MUSIC, WORCESTER, MASS., CHAIRMAN

The Department of Music Education of the National Education Association labors under some disadvantages in taking up any line of work and pushing it from year to year.

Our meetings are nearly always well attended, but if we count the individual members who consistently follow the annual meetings of this section we shall find that their number is small in comparison to the whole. In one view of the matter, this may be regarded as not entirely unfavorable. A little leaven scattered here and there leavens the whole lump, and we are justified in believing that from each meeting-place, widely scattered as they all are from year to year, something of inspiration goes out as a permanent uplift to the whole neighborhood round about. Thus, instead of an intensive influence covering the subject encyclopedically and possibly not reaching very far geographically, we scatter each year a little good seed over an area quite remote, it may be, from the field of the previous year's sowing.

These conditions require me, as Chairman of the Committee on Terminology Reform, to preface consideration of the Report which you hold in your

hand by a brief statement of the history of the movement so far as the National Education Association is concerned, that you may be made aware of the status of the matter today.

In 1906 the President of this Department, Hamlin E. Cogswell, appointed a committee of five to inquire into the subject of needed changes in the terminology of music, and requested that a report be made at the 1907 meeting at Los Angeles. This committee was made up with reference to getting as comprehensive a view of the subject as possible.

The professor of music at Tufts College, the trainer of teachers for public-school music in the University of Illinois, and three supervisors of music, each laboring under totally different conditions, were named as the Committee on Terminology Reform.

The committee reported at Los Angeles, presenting twelve very simple recommendations and establishing a platform which declared that reform and not revolution was to be the aim. These recommendations were all adopted and the committee was continued until the Cleveland meeting, where it presented a list of recommendations in printed form. Time was lacking for full consideration, and the vote of the Music Section on the matter heads the list which you hold in your hands.

A realization of the undesirability of some of our terms is no new thing. Dr. Callcott in his *Musical Grammar*, published over one hundred years ago, suggested one change which appeared in our 1907 list, and strong, honest men there have been all along the way, who, on getting a clearer view, were not afraid to say they had been wrong.

Such a man was Dr. Lowell Mason who died at the age of eighty, and whose publications cover a period of nearly fifty years. His *Boston Academy of Vocal Music*, published in 1834, which ran thru many editions, was filled with the same loose statements that prevail today. In his subsequent books he continued up to 1864 to follow the old path, but in the latter year, after having been continuously on record for more than forty years, he copyrighted a little book for use in public schools in which he prefaces a list of his former errors with these words: "In some of the earlier publications of the editor it is stated," etc. In taking this stand he demonstrated that he was not of that class which Emerson was considering when he said "A foolish consistency is the hobgoblin of little minds."

My opportunities for feeling the terminology pulse of the Middle West have been somewhat limited, but it would seem that the excellent influence which radiated from Dr. George F. Root, of Chicago, should have done much for that section.

In the case of both Mason and Root, the awakening came in the evening of life, and their younger contemporaries lacked perception to see the differences which were so clear to them. If they could have received their light twenty years earlier their influence would have counted for much more.

What the Pacific Coast thinks of terminology reform is shown by the

adoption at Los Angeles of the recommendations of the committee, and I want to say to you that in New England and New York the attitude toward this subject has undergone a most radical change in the last ten years.

There is in the East an organization called the Eastern Educational Conference which is of the greatest benefit to our musical interests. It is composed of the members of the music departments of all the colleges in New England, New York State, and vicinity, and meetings have been held at least annually for the last four or five years. The college men invite representatives from the secondary schools, and much helpful discussion takes place. At the last meeting, some two months ago, the subject of terminology appeared on the printed list and the discussion proceeded in a manner which showed that those present regarded the subject as worthy of respectful consideration. I think I am safe in saying that ten years ago such a subject would have received no consideration whatever from a body of college men.

The association of teachers in the Middle West, which met first at Keokuk and whose meeting last May was held at Indianapolis, is composed of supervisors and directors of music of the genuine wide-awake sort, who may be trusted to forward any work which is worthy the consideration of people alive to present-day needs. In closing my preliminary talk and before throwing the report open for discussion, I want to speak of another organization, the Music Teachers National Association, which is doing a fine work and issuing its annual proceedings in a dignified and well-printed volume which can be bought from the secretary of the association.

In its roster of members are the names of several people that I see today. The next meeting of this association is at the Northwestern University, Evanston, Ill., and I hope it will be the occasion of a large increase in membership. The latest available membership list shows members from 38 states and the District of Columbia. The Middle States lead with 143, followed by the Central States with 121; New England, 80; Southern, 40; Western, 35. New York State leads with 71 to its credit, while my own state (Massachusetts) ranks second with 57.

At the last meeting of the M. T. N. A. held at Washington, D. C., the President, Waldo S. Pratt, made an address on the subject of "System and Precision in Musical Speech," which, as its title indicates, bears directly on the subject we are considering. Professor Pratt is a man of liberal education, sound scholarship, and is well versed in the laws of language. Of the Music Teachers National Association which, as compared with ours, is very stable in its membership, he says: "Our energies are not consistently focused or continuously maintained." Also, "The time will surely come when this association, if it is to hold its leadership and fulfill its office, will again attempt to put on record some ideas in this field. For progress, to be worth while, must be collective." On the nature of the general subject of terminology he says: "It is not so much one of action as of thought."

I think he means by this that more and more the trained voice must be

supplemented by the trained intellect, and the trained hand by the educated brain if the vocalist or pianist is to be a teacher of the desirable sort, for he says: "The choice of words and their precise application to thought are responsibilities that pursue every one of us thruout the hours of every professional day. No teacher can escape their pressure. But let us remember"—and right here is the point—"let us remember that these responsibilities cannot be met out of what we call 'temperament' or out of executive dexterity. Terminology belongs on the scientific side of musical culture and demands scholarship."

The present needs of the cause of terminology reform may be summed up as follows: Men, strong and resourceful, in the prime of their sledge-hammer-swinging days, and women, quiet and conciliatory, but convincing, whose life expectancy will enable them to give probable years of attention to the task of getting into general use a terminology which shall be true to fact and true to usage.

The first portion of the report was printed that you may know exactly what was passed at Los Angeles, and the second part beginning "Concerning the 1908 Report," etc., contains the material we are to consider this afternoon.

THE REPORT OF THE COMMITTEE ON TERMINOLOGY AS VOTED UPON AND ADOPTED AT THE
DENVER MEETING

- 1a. The staff is a character composed of five horizontal lines and their spaces.
- 1b. The lines are named from the lowest upward: 1st, 2d, 3d, 4th, 5th; the spaces: space below, 1st, 2d, 3d, 4th, space above.
- 2a. The G clef causes the second line of the staff to represent the pitch $\bar{g}$.
- 2b. The F clef causes the fourth line of the staff to represent the pitch f .
- 3a. A line or space (clef understood) represents a certain pitch; a sharp on a line or space causes it to represent a pitch one half-step higher.
- 3b. A flat on a line or space causes it to represent a pitch one half-step lower.
- 3c. The double-sharp is a character which causes a staff degree to represent a pitch two chromatic half-steps higher.
- 3d. The double-flat is a character which causes a staff degree to represent a pitch two chromatic half-steps lower.
- 4a. With two sharps in the signature, treble staff, the fifth line and third space, and all octaves of these degrees are sharped.
- 4b. With one flat in the signature, treble staff, the third line and all octaves of this degree are flatted.
- 4c. In the key of B major, sharp-two is represented by double-sharpening the C-degree.
- 4d. In the key of D-flat major, flat-six is represented by double-flattening the B-degree.
- 5a. The right-hand sharp in the signature is on the staff degree that represents seven of the major scale.
- 5b. The right-hand flat in the signature is on the staff degree that represents four of the major scale.
- 6a. When a staff degree is sharped in the signature or elsewhere, it may be made to represent a pitch one half-step higher by the use of a double-sharp.
- 6b. The pitch $\bar{g}$ is represented by the second line of the treble staff.
- 6c. Staff degrees (clef understood) represent pitch.
- 6d. Notes are characters representing duration; when placed on staff degrees they indicate pitch.
7. Place a quarter-note on the fourth line.

8. (Not accepted.)
9. The march was written in 4-4 measure, or four-quarter measure.
10. All notes of less value than quarter-notes are distinguished from one another by the different number of strokes upon their stems.
11. Brace is recommended.
Example: Sing the third measure of the first brace.
- 12a. Major and minor keys having the same signature should be called relative major and minor.
- 12b. Major and minor keys having the same tonic but different signatures should be called tonic major and minor.
13. Not discussed.
14. Not discussed.
15. Not discussed.
16. There is a rest on the last beat of this measure.

CHARLES I. RICE, *Chairman*
CONSTANCE B. SMITH
LEO R. LEWIS
WILLIAM B. KINNENAR
P. C. HAYDEN

Committee

OUR NATIONAL SONGS

ELMER ELLSWORTH BROWN, UNITED STATES COMMISSIONER OF EDUCATION,
WASHINGTON, D. C.

I think there is no singing of our national songs which impresses one more deeply than that which one hears in the schools made up of children who have recently come to America. When our immigrant children, to whose fathers America has meant liberty and hope and a new world, come to sing those songs which we regard as the special possession of true-born Americans, there is a spirit and a pathos in their singing which is indescribable. It would be a gain for all of our people if we might have our national songs as well sung all over the land as they are sung in some of those schools of foreign-born children in our great seaboard cities.

It is difficult to make any definite suggestions as to ways by which this result may be accomplished. It has occurred to me that a series of those songs which should be a universal possession might be arranged by some such body as this department, with a view to having one or more of them designated each year to be learned and sung by the children in all our public schools. If such a series could be devised, to run over a term of three or four years and then begin again, we might have attention directed to this matter in a way that would produce desirable results.

Before such a plan could be worked out successfully, it would be necessary to agree upon the arrangement and the text of the songs selected. The members of this department are undoubtedly familiar with the various efforts which have been made to secure the adoption of a uniform text and score. The correspondence which Miss Shawe of St. Paul, Minn., had with President Roosevelt upon this subject is doubtless well known. When Miss Shawe's

inquiry was submitted by President Roosevelt to the Librarian of Congress, it brought forth an interesting reply, which dealt, however, almost exclusively with the text of the songs in question. The Bureau of Education was also consulted upon this subject. The only reply that could be made from that office was that it had no provision by which it could contribute to a determination of the standard as regards either text or arrangement, but that if a standard could be agreed upon the Bureau would be able to assist in the movement by the publication of such standardized songs in the form of a bulletin. It is generally agreed that only Congress or the President could determine a standard which should be accepted as authoritative beyond peradventure. It is, of course, necessary that a standard should be accepted as authoritative by the army and navy on the one hand and by the schools and musical societies on the other. As preliminary to the determination of such a standard, it would be a very important step if the leading organizations for the teaching of music thruout the country could agree among themselves upon a standard of their own, which should be offered as a contribution toward the determination of an official standard. It would seem desirable to this end that there should be co-operation between this department and the Music Teachers' National Association and other similar bodies of national scope and influence.

As having some possible interest to this department, I am submitting herewith a brief list of references concerning our national songs which has been prepared in the Library of the Bureau of Education. If it is thought that such a list will be serviceable, it may be published as an appendage to this brief paper of mine.

NATIONAL SONGS

- BANKS, REV. LOUIS ALBERT. *Immortal Songs of Camp and Field*. The story of their inspiration together with striking anecdotes connected with their history. Cleveland, Ohio: The Burrows Brothers Co., 1899. 294 pp., ports., illus., 8vo.
- BRINTON, HOWARD FUTHEY. *Patriotic Songs of the American People*. New Haven: The Tuttle, Morehouse & Taylor Co., 1900. 111 pp., 12mo.
- BROWN, JAMES DUFF (editor). *Characteristic Songs and Dances of All Nations*; with historical notes and a bibliography; music arranged for the pianoforte by Alfred Moffat. New York; Scribner (1902), iv, 276 pp., 4to.
- KOBBE, GUSTAV. *Famous American Songs*. New York: Thomas P. Crowell & Co. (1906), xviii, 169 pp., ports., illus., 8vo.
- SMITH, COL. NICHOLAS. *Stories of Great National Songs*. Milwaukee, Wis. (etc.): The Young Churchman Co. (1899), 238 pp., ports., illus., 12 mo.
- SOUSA, JOHN PHILIP (Bandmaster, U. S. M. C.). *National, Patriotic, and Typical Airs of All Lands*, with copious notes. By authority (U. S. Navy Department. U. S. Marine Corps). Philadelphia: H. Coleman (1890) 283 pp., 4to.

MUSIC ON AN ACCREDITED BASIS

JOHN R. KIRK, PRESIDENT OF STATE NORMAL SCHOOL, KIRKSVILLE, MO.

The advancement of music education seems easy enough provided it be given rational treatment. The doctrine of this paper is that music education in all grades of schools and colleges should be upon a common basis with other

school and college studies. Music should be recognized as a study, a substantial study, not a mere drill or easy subject to be mastered by repetition. Under proper treatment music should be accredited as a major subject of equal value with other academic subjects, such as language, history, science, literature, and mathematics.

Music education should cost no more and no less than education in any other subject. Those persons who are permitted to teach music should have a sound general academic education, the same as people who teach other school and college subjects. It seems ridiculous that we furnish free, in the public schools, normal schools, and universities, the best possible education in Latin, Greek, agriculture, domestic science, etc., while requiring ambitious and talented young people to go aside and pay large fees in order to get, thru special conservatories, the education in music which their natures require. I use language advisedly. It is ridiculous that music education should be made to cost more than other education. It is unfair to music. It is unfair to music teachers. It is unfair to thousands of good students of music. It is unfair to the schools at large that we drive music into isolation. All the schools need the concentrated mass effect and the unparalleled stimulus of music intelligently taught.

Our existing irrational customs make it possible for those having money at their command to secure education in and thru music, and impossible for those without money at their command to secure the same, while education in all other forms is practically free.

It is a further doctrine of this paper, based on observation, that music education will lift into high efficiency just about the same proportion of the community as can be brought into a high degree of efficiency thru any other subject. A few children have defective organs. A few cannot discriminate among colors or among sounds. A few have defective vocal organs. Perhaps a larger number are defective as to mathematical ability. It will therefore be seen that, from the standpoint of the capabilities of students, music should be put on a par with the other studies. But what is our custom as to the accrediting of subjects? Let one brief story illustrate:

I know a high-school girl, age eighteen. She is about ready to enter the university. Algebra comes easy to her. She has a rank of "excellent" for every month in algebra. Fifty minutes daily suffice for her to master any algebra lesson. On presenting herself at the university, she is welcomed and receives credit for algebra as an entrance requirement; not because she remembers the binomial theorem or quadratics or negative exponents. She is admitted, theoretically at least, because thru algebra she has secured the power of concentration and of analysis and self-expression.

But I happen to know a rugged young man of the same age. When of freshman high-school rank he could play the piano very well. He was the son of an itinerant preacher and had to make his own way. Instrumental and vocal music came to him naturally. He had a good voice and sang well;

but algebra was a burden to him. He could barely get passing grades. Geometry was very difficult for him. But he learned history and literature without much difficulty. He learned language readily. For two or three years he worked with great zeal in heavy, dull-looking books that treated of harmony, counterpoint, history of music, orchestration, and such subjects. It required two hours daily to prepare the lessons and the young man was delighted to prepare those hard lessons relating to music. When of senior high-school rank, he could speak extemporaneously and fluently in his literary society or elsewhere on what music has done for civilization. This young man has the power of mental application and of analysis. He has marked facility in expression. On entering any higher institution, however, he will get little or no credit for those attainments which come to him thru his hard and fruitful work in music. That subject is "not on an accredited basis." The universities, most of them, have not yet found out about it. Their eyes are on the traditional curriculum. How utterly ridiculous, how illogical! But such is the situation in the year 1909.

The writer of this paper is able to exemplify, in a large institution of college rank, the doctrines of the paper. The school in question has forty teachers and nearly six hundred students in daily attendance twelve months in the year. The students are prospective teachers averaging twenty-two years of age. They will teach in schools of all kinds from kindergarten to high school inclusive. This institution offers five years in music, taught by people of as good general scholarship as those who teach literature, history, and other subjects in the best schools and colleges. The institution has five teachers of music, four of mathematics, three in foreign languages, four in history, five in science, two in art, five in English, two in athletics, and ten or twelve in other subjects. The institution charges \$25 per year of twelve months for every student that enrolls. No other fee is charged. Should the student pursue four studies, the fee is \$25. Should the student pursue but one subject, the fee is the same. It costs in this institution precisely the same to get mathematical education as it does to get music education. The institution is supported chiefly by permanent revenues, about \$70,000 per annum. All courses are measurably elective. The student must have a major study in which he shall offer four or more college units. His major may be music. If so, his attainments in vocal music are usually preliminary to his series of major units. He must offer four units in such severe studies as harmony, counterpoint, orchestration, history of music, etc. Grouped around the major study of each student there must be others that contribute to the effectiveness of the major study. The latter is presumed to constitute the ultimate specialty of the student.

There are absolutely no "snaps" in this school. Most of the students are not looking for easy studies. If any of them are searching for an easy route to graduation, they are soon convinced of the futility of their efforts.

The student having music for his major must have pretty large resources

in literature, history, and language. He must have knowledge of physics and some knowledge of human physiology, for without these he can never be accounted a highly efficient director of music.

I should say in passing that this institution with its large resources puts art education on a par with music education and other forms of education which contribute to the efficiency of public-school teachers: The institution uses all practicable means to encourage general interest in music and enjoyment of musical programs. The entire school, including the faculty, is accustomed to meet at 10:00 o'clock each forenoon to spend twenty-five minutes in general exercises. Four-fifths of the time is spent in singing.* Several series of the best available music books are always at the command of the school in sufficient numbers so that all students and teachers may have books. We occasionally change from one book to another. The books are furnished by the institution at no expense to students or teachers. It should be mentioned, too, that a majority of the books appertaining to the study of music are to be found in the library of the institution so that the financial status of any given student has no relation to the choice of his studies. He may secure a reasonably complete music education without paying a penny in the form of extra fees such as conservatories of music charge. The institution is not in any sense out of harmony with existing conservatories of music. It would gradually take into its teaching faculty those people of highest efficiency in the nearby conservatories of music. The institution does not have a conservatory of music. It has a department of music on full equality with other departments. Some of its graduates, in order to secure the highest attainable specialization, go to the great conservatories of music in the large cities. The institution usually has a special chorus of a hundred or more voices and gives annually in the spring of the year a music festival, joining the chorus of the institution with a musical company like the Minneapolis Symphony Orchestra in the production of some such masterpiece as *The Creation*.

Slowly but unwaveringly we propose to create and modify sentiment for music in Missouri. We are producing more music supervisors than any other institution in the state, and I believe the field and the opportunities to be encouraging and practically illimitable.



DEPARTMENT OF BUSINESS EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—S. R. HOOVER, vice-principal, High School of Commerce, Cleveland, Ohio.

Vice-President—D. W. McMILLAN, head of commercial department, West High School, Detroit, Mich.

Secretary—HARRY C. SPILLMAN, teacher of commercial branches, High School, Butte, Mont.

FIRST SESSION.—TUESDAY MORNING, JULY 6, 1909

The Department of Business Education of the National Education Association met in the Central Christian Church, Denver, at 9:30 A. M. and was called to order by President S. R. Hoover.

The Rev. Christian F. Reisner of the Grace Methodist Church not being present, an invocation was offered by President Hoover.

A violin solo was rendered by Miss Monahan, of Denver.

The President's address was delivered by S. R. Hoover, vice-principal of the High School of Commerce, Cleveland, on the subject, "The Next Advance Movement."

H. M. Rowe, educational publisher, of Baltimore, Md., read a paper on "The University of Commerce: What it Should Teach and Why."

The discussion of this paper was led by J. E. Huchingson, supervisor of penmanship, Denver, Colo., with further discussion by A. Gideon, State Normal, Greeley, Colo., and W. N. Clifford, of the Southern High School, Philadelphia, Pa.

The last paper of the session was read by J. J. Sheppard, principal of the High School of Commerce, New York City, on the subject, "High School of Commerce or Commercial Department."

The president appointed the following committees:

ON NOMINATION

C. W. Bigelow, Denver, Colo.

H. B. Brown, Valparaiso, Ind.

H. M. Rowe, Baltimore, Md.

ON RESOLUTIONS

Coleman Hall Bush, Colorado Springs, Colo.

Ira N. Crabb, Denver, Colo.

Harry C. Spillman, Butte, Mont.

A motion was made by Dr. Rowe, of Baltimore, that the election of officers be advanced to the Thursday meeting instead of on Friday as provided by the program. The motion prevailed.

SECOND SESSION.—THURSDAY AFTERNOON, JULY 8

The meeting was called to order by President Hoover at 2:30 o'clock.

Miss Elizabeth Van Sant, of Van Sant's School of Shorthand, Omaha, Nebr., read a paper on "Possibility or Desirability of a National Uniform System of Stenography."

This paper was discussed by Carl Marshall, of Cedar Rapids, Iowa; Dr. Rowe, of Baltimore, Md.; W. T. Parks, of Denver, Colo.; and A. Gideon, of Greeley, Colo.

The topic, "Illustrative Materials in Teaching Commercial Geography and Commercial Law" was informally presented by H. B. Brown, of Valparaiso, Ind.

The Committee on Resolutions presented the following report, which was adopted:

REPORT OF COMMITTEE ON RESOLUTIONS

Resolved, That this department extend a vote of thanks to the Committee of Department Meetings for their splendid provisions for our sessions, and to the president and

officers of the section for the excellent program provided, and to those who so ably presented papers and led in discussions before this section.

That cultural training and vocational training are not antagonistic. Life is fundamentally a unit despite its manifold phases. That education which leaves out of account application to human affairs is visionary; that education which spurns the truly cultural element is seriously defective. Education must take into account the whole man.

That to meet the ever-increasing popular demand for commercial instruction in high schools as evidenced by the growth of such departments wherever they have been opened in high schools, and also by the phenomenal growth of the high schools of commerce in large cities, it is the opinion of this department that in every city where there are three or more high schools, one should be a high school of commerce, since a commercial department in a classical or other high school can at best deal only in a tentative manner with the problems of business education.

That it be earnestly recommended to all principals, superintendents, and others in authority over schools having commercial courses that they be given equal place and standing with all other courses in the school and that in particular the teacher in the commercial branches shall have the same moral support, consideration, and encouragement that are given to teachers in other branches.

That the educational and cultural values of the vocational branches are much underestimated because they are not understood.

That full commercial courses should be considered as finishing courses and they should be planned to meet definite purposes.

Respectfully submitted.

COLMAN H. BUSH, *Chairman*
IRA N. CRABB
HARRY C. SPILLMAN

The Committee on Nominations reported the following:

For *President*—James S. Curry, Commercial Department, Central High School, Cleveland, Ohio.

For *Vice-President*—Harry C. Spillman, Commercial Department, Butte High School, Butte, Mont.

For *Secretary*—W. N. Clifford, Head of Department of Commerce, Southern High School, Philadelphia, Pa.

On motion the report of the committee was adopted and the secretary instructed to cast his ballot for the officers named.

ROUND-TABLE SESSION.—FRIDAY AFTERNOON, JULY 9

This session consisted of a discussion of the addresses delivered on Tuesday and Thursday.

Final adjournment.

HARRY C. SPILLMAN, *Secretary*

PAPERS AND DISCUSSIONS

THE NEXT ADVANCE MOVEMENT

S. R. HOOVER, VICE-PRINCIPAL OF THE HIGH SCHOOL OF COMMERCE
CLEVELAND, OHIO

Education which does not lead is a misnomer. However far afield the artisan, the plowman, or the inventor may fare, Education must still see to it that she flies far before, beckoning ever to larger achievement. In the days when our semi-savage ancestors clothed themselves in the head of a bull, some blue paint, and a howl that would make a Mohammedan dervish turn several different shades of green, any occupation which did not involve the use of some blood-shedding implement was considered beneath the dignity of

a man. The venturesome merchant who carried the articles of civilization into those northern wilds and offered them for sale to the worshipers of Odin and Thor was set down as unworthily effeminate. A relic of this barbarism still clings to the descendants of the Anglo-Saxon in the prejudice held in many quarters against one who has made his money in "trade" instead of by inheritance from some freebooter a few generations back.

The noble calling of arms was the profession par excellence. To this have been added from time to time other professions of more or less value. Some of them have added much to human comfort and happiness. With others we could have very profitably dispensed. But the professional in every case means a special school of training. Medicine and law, the school-room and the church, the newspaper and the surveyor's transit have laid legitimate claim to recognition, and for the training of those whose choice falls along these lines there are schools, colleges, and universities containing libraries, museums, and laboratories with every conceivable facility for research and experiment. To this list have been added the professional hypnotist, baseball player, football player, athlete, pugilist, barber, and what not. And we have "colleges" for all of them. But he who would learn the theory and practice of commercial life must still resort to the ancient method of Squeers, and learn to do by doing.

It seems difficult for many business men, to say nothing of classical educators and professional men, and sometimes even for us as commercial teachers, to get out of our chrisalid notion that any education connected with commerce should be necessarily inferior in quality and of such a character as to require less exercise and development of gray matter than is expected of those who take the sacred dust of dead languages as the bread which cometh down from heaven. It has therefore been generally true in the history of education that as soon as the boy showed his inclination toward a commercial career he was placed in the school's ward for the weak-minded, and given what a carpenter would call a hatchet-and-saw course.

Now it remains a fact, in spite of all this handicap, that no better brain power is found anywhere in this country than in its commercial activity. The same thing will be true of all lands in the very near future. I do not know whether the bee is so intent upon the business end of his occupation that he does not see the beauty of the flower from which he gathers the honey or not, but I suggest that the human worker should be so *educated* that life means to him all its beauty and all its perfume, as well as all its honey. I am aware that this accomplishment would remove one of the prolific sources of the punster's and cartoonist's stock in trade, but there might be balm in Gilead for even that excision.

It is not because there are not sufficient funds in our treasure-houses that this particular need has not been met long ago. Institutions of almost all kinds have been founded, supported, and endowed, and all with money made by those in commercial pursuits. To provide an institution of university

grade for the training of leaders of trade and captains of industry with expert teachers of business culture, ethics, history, applications of the sciences, world-markets, etc., is a larger opportunity for some philanthropist than the endowment of libraries or the establishment of chairs in dead languages, or the search for mummies and scarabs that are still more dead.

American industry may be said to have passed thru two stages of development. In the first, other countries were under no necessity of taking notice of our little efforts. We were just learning how, and were often amusing to those of older growth. But this gradually gave place to the second stage in which we had learned how, and began to draw on the natural resources of the country. These were so tremendous that competition was almost swamped by the sheer sweep of an overwhelming supply. The result was the American invasion of old-world markets in such fashion as to leave Eurasian industry dazed and gasping for breath by the wayside. But we have reached the beginning of the third stage. These old-world workers will not continue to lie down. They are again up and at it. The case will not be allowed to go by default. Every means of education and training at their command is being pushed to its utmost. Every representative of the government is also an agent for every salable commodity produced in the home land. And this manifestation of energy must be met by equal earnestness, equal zeal, and equal skill on the part of our producers or the "American industrial invasion" will be like the march of the King of France and his twenty thousand men who marched up the hill, and then marched down again.

If we as teachers of commercial subjects have reached the point where we are ready to undertake the tasks such an advance movement must involve without selfishness, there will be found men in the marts of the American Rialto who can and will supply the necessary funds to give it being and to keep it alive until it has won the place where it will no longer need the protection of an infant industry. If it is to be made the arena of quarrels over different systems of this, that, or the other method of teaching a subject; if it should by any misfortune become the hothouse for the culture of fads and long-cherished freaks; if it should suffer the imposition of a corps of teachers who seek in the establishment of new institutions eleemosynary conveniences; or if it should be merely the exponent of some individual for the furthering of private ends, it had better remain for the future to see its establishment.

But if we are ready to lay aside our prejudices; to look at the matter from the standpoint of the business world and its needs; to give to it the best efforts of our lives for the sake of the boys and girls who are to be; to look far down the road which leads into the future of our land, and with a patriotism that is worthy the sons of a profession at whose head stands the Man of Galilee, to answer the call for men of iron will, indomitable courage, and supreme self-sacrifice, then this ideal of an advance movement will become reality. Who is ready to answer to a call like this?

I. THE UNIVERSITY OF COMMERCE: WHAT IT SHOULD TEACH AND WHY

H. M. ROWE, EDUCATIONAL PUBLISHER, BALTIMORE, MD.

"Schools like this one and universities like Princeton must pass out of existence unless they adapt themselves to modern life." This is what Dr. Woodrow Wilson said at St. Paul's School, Concord, on June 4. A conviction that the universities have not adapted themselves to that phase of modern life in which we, in this department, are especially interested is the reason we have for the consideration at this time of a university of commerce, because commerce *is* modern life, and most of modern life is commerce; for commerce in the broad sense is social, religious, political, and industrial intercourse between the people. The exchange of commodities is but one of its features. Modern commerce, moreover, is vastly different from the commerce of antiquity. Commerce is the pathfinder of civilization. It is the most modern, up-to-the-minute thing we have.

On the other hand, the university as we have it is the outgrowth of an ancient institution, and its traditions find their beginnings in antiquity. Unfortunately, the history of education tells us that scholasticism and traditionalism have been inseparable companions all down thru the ages, and notwithstanding the enlightenment of this twentieth century, it is conceded that these copartners of obstruction still stand in the way of our higher schools fulfilling their largest usefulness and rendering their greatest service to humanity.

Higher education as it finds expression in our universities—in their curricula and in their faculties—presents to the student of education many strange and conflicting characteristics and perplexities, particularly when we consider the university as the center of enlightened thought and as the dominant promoter of what is popularly termed "liberal education." The traditional university life, the traditional university thought—the "university spirit," as it is frequently named—is an orientalism, an exotic. No one who has come in contact with university life, its precepts, teachings, doctrines, and sentiments, can deny the present existence of this spirit. No course of study, no school of thought, no faculty, seems to have escaped this touch of orientalism. It appears to be coexistent with university life. It is less apparent, perhaps, to those who are university bred than to others. I have been close enough to study the symptoms without catching the disease. You do not have to have the measles in order to know whether or not it is the measles, or how to diagnose it.

Without attempting to trace the influences of this traditional spirit upon the modern university in other directions, it is proper for us to give consideration to the effect it has had upon the university's attitude and teachings toward commerce and industry as they are manifested in the business callings, trades, and professions.

It is in our commercial and industrial development and expansion that we

find the essential elements of our national prosperity and the happiness of our people. They touch intimately upon the existence of every individual, be he a worker or a drone. They constitute the very synthesis of modern life, and it follows that if our system of public and private education, as it finds expression not only in our colleges and universities but in the lower forms of educational effort as well, is actually to meet the conditions of modern life, it must give adequate attention to commerce and industry, because it is thru a training for efficient participation in these occupations that the greatest benefits will come to the largest numbers.

Does our system of education, in a broad sense, accomplish this? Yes, to some extent it does; but it is a significant fact that it was left for the private commercial and trade schools to discover and provide what was lacking and what was most wanted. It is noticeable, too, that these are the schools farthest removed from the university, just as the university is farthest removed from the common people and their pursuits.

Then public opinion forced the high schools to introduce the commercial branches; but at once the traditional sanctity of the cultural studies as against the practical or vocational studies intervened, coming down from the university thru the teachers employed in our public schools, with the result that the commercial branches were introduced under protest in many high schools—the first step, mark you, removed from the private school—and in some of them they are even now merely tolerated, and denied the place and consideration which their importance merits, as a result of exactly the same traditional scholastic intolerance that it is charged has hindered the universities in their other departments from adapting themselves to modern life.

Giving way to the weight of public sentiment and demand, some of our universities have established schools and departments of commerce; but here again the miasma of the same traditional opposition has tainted the atmosphere which surrounds these schools and departments, so that it is impossible for them to manifest in their development that healthy, spiritual growth and vigorous appreciation of the real requirements of modern life that our commercial and industrial situation demands.

These schools and departments are all characterized, more or less, by two distinct phases of scholastic traditionalism. One is that all good things educationally must come from abroad. Whenever one of these schools is established, the first thing is to send the head of the faculty to European schools in order to import a cargo of European ideas, processes, and methods. Hence we find in these schools and departments very much that bears a foreign stamp and that is intimately related to foreign commerce and industry, but which does not touch at all, or at best only remotely, the necessities of American industry, with the result that we do not have a single standard university school of commerce that is distinctly and distinctively American in its teachings, in its thought, and in its attitude toward the solution of the problems of the American business man.

The other phase of traditionalism is that the vocational branches, or more specifically for our discussion, those branches which relate to commercial and industrial life—to “trade,” as the Englishman, the Frenchman, or the German would call it—are deficient in their cultural value, are plebeian in their practical application, and are therefore beneath the consideration of the university student with his superior mental caste and capacities.

The existence of the first mentioned phase of traditionalism, or more properly of educational insanity, would doubtless be denied by even the most unfortunate of its victims, because one of the peculiar pathological symptoms manifested by these people is total ignorance of their own condition. It is sufficient to say that there is ample opportunity and material for a commercial university of, for, and by the American people and American industry, without going abroad for anything.

The cultural and truly educative value of the vocational branches in comparison with other branches is no longer a debatable question in the minds of those who know the vocational branches; and to discuss the matter with others who do not know them is futile.

In passing, I wish to remark that these criticisms, which may seem to reflect somewhat severely upon the efficiency of our universities in certain directions, are not lightly made. No man can attach greater value to the work the university is doing, in some respects, or hold in higher esteem what it has accomplished than I. That it fails to accomplish in other respects what we have a right to expect it to accomplish is a just matter for discussion and criticism.

Learned specialists in commerce and industry, some of them university men, have realized in recent years that there is a demand for a certain kind of training in the business world which our present institutions do not reach up to, or down to, if you prefer to put it that way. While the professions are amply provided for, a training in business for those pursuits that give employment to the professional man, and all other classes of men, is not adequately provided. These facts have suggested the necessity of a university of commerce, an institution of equal rank and grade with our best universities, but having for its dominating spirit the interests of pure American commercialism and industrialism, and for its object and aim a series of training courses consecrated to qualify for the largest usefulness and service in developing the world's resources and in handling its products.

Doubtless there are those who will look with surprise upon the suggestion of a university of commerce. They have heard that schools of commerce, of accounts, and of finance have been established, and they have perhaps accepted it as a fact that vocational training in its higher forms has been adequately provided. In the minds of those who have given most thought to this matter, however, there is a conviction that our present universities never will nor can do this work as it should be and must be done.

Some of the reasons for this conviction I have stated. The university of commerce that is wanted is one that must be started on a new foundation,

distinctly and radically different in spirit from those of the older institutions. It must be developed and built up by men of different mental training and attitude from those identified with our present institutions. It should have for its head someone with the imagination and the creative capacity possessed by our "captains of industry"—a man who can found a new empire in the realm of higher education, and who can build up an educational structure to meet the requirements laid down in the plans and specifications of modern progress.

The consummation of such an ideal is no mere empty dream. This university of commerce, from the very nature of things, is bound to become a reality sooner or later. It must come as the natural result of necessity. Commerce gets what she wants, and what she must have. This is one of the things she now needs, and the necessity for it will shortly find a way for its realization.

Nor is it the baser elements of business life that will be most benefited by an institution of this sort. Civilization itself finds its largest opportunities for advancement thru commerce and industry. Such an institution would make for the purification of commerce and industry against the meaner and more sordid tendencies which have been so prominently before us recently.

If I have established any good reason for the existence of such an institution as I have described, then it is proper to consider the second query raised: What should a university of commerce teach? In a broad way, the object of such an institution would be the promotion of commercial and industrial education in all those branches of literature, science, and art, or either of them, that pertain to commerce and industry; to conduct, endow, and assist investigation in any department of education relating to commerce and industry, and to the sciences, literature, and arts relating thereto, and to co-operate in every way possible with schools now established, or to be established, in any of the states of the Union, which shall accept and maintain the educational standards and requirements of the institution; to appoint committees of experts to direct special lines of research and investigation; to publish and distribute documents and periodicals; to conduct lectures and recitations, special schools and classes; to acquire and maintain libraries; and in general to do and perform all things necessary to promote the objects of such an institution.

Any attempt to describe in detail the courses of study that should be maintained would be utterly impossible at this time. They will be the result of an evolutionary process. They would naturally include courses in all those subjects associated with business administration, law and government, applied science in the liberal and mechanical arts and trades, industrial processes, and the various other attributes of modern business invention and development. But the departures from the ordinary treatment of these subjects would be in their application and in working them over to meet the particular objects of the institution.

The first subject for profound study and consideration would be commerce

and industry itself in its various forms and functions. The curriculum in each department should find its genesis in the wants of the particular department of business which it is designed to serve, with such adaptations of modern educational doctrines and teachings as are necessary to serve its purposes; and particularly its purposes should not be changed to meet existing educational notions and policies.

Men who make these studies must have unprejudiced minds, uncontaminated and free from any influence that would interfere with or pervert the one single paramount purpose of the various curricula; and, in my judgment, the hope for the final attainment of the objects of such an institution rests in radical departures from and reforms in some of our accepted educational doctrines and creeds. Thus it follows, much as I regret the necessity of the statement, that the ordinary university professor would have no place in the faculty of such an institution. If, in fact, an available one might be found here and there, he would certainly prove to be an educational heretic, and a convert to a new faith, willing to smash old idols and to accept service in a unitarian educational effort.

Any substantial preparation for business must begin with a consideration of the group of subjects commonly described as "mental and moral," including psychology, the social sciences, logic, and philosophy, because the individual must stand right with himself and toward the social, industrial, and political elements which have such a direct bearing upon business affairs, and which enter so largely into the right solution of the great industrial problems which are continually presenting themselves, before he can ever become an efficient man of affairs.

The conflicts between capital and labor, the rich and the poor, the strong and the weak in the business world, too frequently result from disregard or ignorance of the rights of others. These abuses may never be wholly overcome, but they may be greatly curtailed. They are appropriate subjects for the most patient study and investigation. Men must be trained to understand them and to deal with them intelligently and in the right spirit. We have a demand for the establishment of a "department of the humanities," built upon the Golden Rule. History, economics, geography, language, mathematics, business technique, ethics, law, and government are other familiar educational terms which might cover the general character of the instruction; but no formal curriculum can be described for an institution that is intended to be a pioneer of its kind, designed to extend its efforts into new fields of labor involving new materials that up to this time have not been subjected to assortment, classification, and that scientific arrangement which would constitute the substance of its courses of training.

I have not attempted to suggest to you more than a general conception of what such an institution should be, and what it should teach. If I have served to call attention to the urgent needs of that part of the world's activities which are grouped under the heads, "commercial" and "industrial," and if

what I have said shall contribute toward awakening an interest in supplying the help which the business world desires and requires, and which I believe is necessary for the continuation and improvement of our business, moral, political, and social life, and of civilization, my purpose is accomplished.

DISCUSSION

J. E. HUCHINGSON, supervisor of penmanship, Public Schools, Denver, Colo.—An excellent synopsis of my discussion is concisely given in these words: The distinguished speaker, whom I have the honor to follow, is my coadjutor. His intrepidity in resurrecting, as it were, another necessity of modern times is most commendable.

At present, the commercially-inclined student cannot enjoy the educational advantages that are extended to other students. He who reaches expertness in receiving a superior commercial training is compelled to do so thru severe labors in research and the tremendously hard knocks of experience—enormously expensive and seldom encountered in the mastery of other vocations. This drudgery caused by lack of opportunity naturally retards efficiency in the specialty and forces classical work, which is of prime importance, to a side issue.

It is not a feasible undertaking to try to solve this problem of higher commercial education thru the university of classics, where concept prevails that industrial training has no cultural value, and whose faculties are not in sympathy with and have not the fullest appreciation of higher commercial education. The time may be near but it has not yet arrived when commercial training can demand its proper and just recognition. If we depend upon the universities, as they now stand, it will mean a long period to span before we can hope for victory. It is not a matter of victory for our consideration, it is a question of how long we are to fight. The establishment of innumerable commercial high schools, business colleges, commercial departments in high schools, and colleges and private business schools, in no small measure, reveals the fact that commerce is the very essence of life itself. These commercial institutions are of the greatest importance, but they should only be a means, not an end.

The university of commerce, as proposed, a great institution where men and women of our country could find high-grade commercial training, in a congenial environment, and at the same time subserve their interests in classics and receive the whole on the basis of cultural education, would offer rights, privileges, and scholastic standing for the individuals especially interested in commerce, and further the systematized methods which marvelously rapid advancements in the commercial field during the past quarter of a century have created.

The commercial university, as in the case of any other university, would aim to educate; its curriculum would cover all of the principles of higher commercial education, with an emphasis placed upon its specialization. Education, in its broad meaning, consists of that training of an individual which develops his faculties, acquaints him with the economic condition of man, combining culture, experience, and practical application to his recreative and vocational activities, increasing his happiness, and providing for his future in the best possible way. This definition cannot be applied when either of two extremes exists—a student who has been trained to make money and hoard wealth, without regard for culture, refinement, moral happiness, and due regard for the welfare and happiness of others; or a student who has received an exclusively cultural training, without an embodiment of those subjects that are of greatest practical value.

It may not be advisable to state that traditionalism is the serpent to crush. We are extremely proud of our institutions of higher learning—they are the greatest and most progressive in the world.

If it is true that no demand exists for commercial universities, and if it is true that

universities are governed by what is required of them, then we must submit to the proposition: A commodity without demand has no reason to be supplied.

Whether or not the failure to foster higher commercial education is attributed to the traditionalism of university life, or to its seemingly insufficient demand, it is an unfortunate fact that something has prevented the establishment of an indispensable factor of a present-day, progressive people—the university of commerce.

A. GIDEON, State Normal School, Greeley, Colo.—My presence here is due not to my membership in your department, but to my sympathetic interest in business life, especially, however, to my interest in education in its wider aspects. I came here to learn what the university of commerce stood for. In more than one discussions heard since the opening of the Council, I have noticed a confusing misuse of the term culture, as if culture meant mere polish, a superfluous veneer, as if cultural training and vocational training were antagonistic. This confusion has come down thru the ages; it is not absent even from the deliberations of the Council; yes, it is sometimes present even in the discussions of the Department of Business Education. It disregards the essential unity of human life. Life is fundamentally a unit despite its manifold phases. That education which leaves out of account application to human affairs is visionary. That education which spurns the truly cultural element is debasing. Education in the human sense takes into account the whole man.

W. N. CLIFFORD, head of the department of commerce in the Southern High School, Philadelphia, Pa.—There is no doubt a great deal of misunderstanding on the part of the people generally as to the meaning of the word commerce. Many have the idea that it simply includes shorthand, typewriting, and a little bookkeeping. The business college is to blame to quite an extent for this erroneous idea. The business departments established in many of our high schools at present include only these subjects which we designate as business technique, but the high school of commerce includes not only the business technique but it also includes vitalizing all the studies taught in any standard high school. Few people realize that the province of the commercial high school, or the high school of commerce, as it should more properly be termed, is a more intimate association of the subjects as usually taught with life. It has been necessary for years to learn over again the subjects after we go out from schools. Why not teach them in school so that a person can go out into life ready to take up the active duties? In the Princeton Theological Seminary this past spring a cry came from the students for a lecture course more directly associated with life's work. The old professors rose up in arms and objected to changing their plan of work which had been in vogue for the past half-century. A cry came from the pews to the pulpit asking for a more vitalizing religion; a cry comes today from the school desk, from the business desk, from life everywhere for a more vitalizing form of education. Of course a great deal of prejudice exists on the part of men who were brought up with the belief that Latin, Greek, and a little mathematics are all that is necessary for a liberal education. But today a liberal education means not only the old, stereotyped college course, but the broader courses that are offered in the schools of finance. There are not many of these schools established, but the people always get what they want, and the demands of the people will be heard; so the paper just read which advocates the establishment of a university of commerce will be answered in the near future, not only by one university but by many universities. Soon the terms "liberal education" and "cultural education" will apply to that form of training given in our best schools of commerce.

II. HIGH SCHOOL OF COMMERCE OR COMMERCIAL DEPARTMENT?

J. J. SHEPPARD, PRINCIPAL OF THE HIGH SCHOOL OF COMMERCE, NEW YORK, N. Y.

The question I have been asked to consider is the advisability of a separate commercial school where conditions warrant a choice between that and the maintenance of commercial courses in the ordinary high school. In the smaller cities of the country the number of commercial pupils would ordinarily hardly warrant the organization of independent institutions, but there are a goodly number of cities apart from those now maintaining commercial high schools where the question of separate schools requires consideration.

The growth of commercial education under public auspices in the past ten or fifteen years has been remarkable. There has been a notable endeavor to do something in this field to meet the criticism that the high school does not fit its pupils for life. Reluctantly, almost apologetically at first, commercial courses were introduced. With little encouragement they steadily grew in favor and importance until now no secondary system of education in this country neglects to make provision for the increasingly large number of students who wish to prepare for business life. We have now reached a point where we may well ask what is the next step to be taken.

There are some who believe that well-planned courses in the ordinary high school is the sufficient and final answer to the question. With that view I will first concern myself. There is no doubt that commercial courses have done much to broaden and enrich the curriculum of the secondary school, that they have contributed in an invaluable way to the equipment of thousands of young men and women. Moreover, there is no doubt that we must continue to put our chief reliance upon this method of commercial training for the vast majority of communities for a long time to come. They are unquestionably a big improvement on the instruction provided in the usual type of business college, and they certainly attract large numbers who would probably otherwise miss secondary training altogether.

Wherein has the commercial course failed? In the first place, there has been a too narrow view of what constitutes commercial training. Generally speaking, bookkeeping and stenography and typewriting, with perhaps a bit of commercial law, have been considered the only necessary additions to the regular high-school course to meet the demand for vocational training along commercial lines. That these are altogether inadequate I hope to make clear later. Secondly, there is usually a feeling that the commercial course is a cheaper, less substantial course than the ordinary course and is after all primarily designed to meet the needs of the weaker, less promising students. It has not led to anything higher educationally, and its graduates are fortunate to secure a job with insignificant pay. To a certain extent this situation is due to the attitude of the high-school principal. Generally a college graduate with more or less classical training, and ordinarily overimpressed with the

value of book learning, he feels no impulse to encourage the development of the commercial course, which seems a prosaic, bread-and-butter substitution for really valuable secondary studies. I have heard more than one high-school principal speak disparagingly of his commercial sections. Fortunately the recent outburst of zeal for vocational training in the schools is putting a different aspect on things, and the administration of secondary schools may be expected henceforth to show a more intelligent appreciation of the real purpose and value of business training.

Again there has been but slight development of the commercial courses. They are taught in much the same way as they were a decade ago. Some amplifications have been made, it is true, and occasionally some additions have been made to the course. Commercial geography is not infrequently met with in the published announcements of commercial courses, and once in a while the history of commerce is included. But as ordinarily taught these subjects are well-nigh useless. An ill-assorted mass of information is put before the pupil which he neither fully grasps at the time nor holds for any appreciable period.

I do not think that we can look to the general high school to give us the improvement in commercial education which is so much needed. Its chief interests are elsewhere. The commercial course is altogether secondary in importance in such an institution. The commercial teachers are usually less liberally educated than the others and their views have less weight. With these conditions as they are, there is distinct need for a school which shall make commercial education its special province; which shall seek to improve what is old and well established in business instruction, and to develop and enrich the curriculum by the addition of new phases. Such a school will not content itself with a reliance upon bookkeeping and stenography as adequate preparation for the business world. It will seek, on the contrary, to make every subject in the course contribute its share to the equipment of the pupil. And that course will be by no means a narrow one. With the exception of Latin and Greek, I know of no secondary subject which cannot be profitably adapted to the needs of commercial instruction. But there must be a complete cutting-loose from the thrall of the college-entrance requirements. The course in biology or chemistry will bear little resemblance to the courses prescribed for admission to college. They will concern themselves largely with the materials of commerce, with the raw stuffs which are made over into the commodities of the market. Language instruction will be little concerned with niceties of style and construction, but it will look toward equipping the pupil with a facility in oral speech which will enable him to make immediate and practical use of what he has learned. History will not be entirely given over to matters of wars and politics, but will lay special emphasis upon the economic conditions which underlie and explain the development of nations. English will not be taught as if the eye of the college professor were upon the work. The needs of the pupil, rather than the demands of the higher institution,

will prescribe what shall be studied and how it shall be studied. In short, the commercial school must assume the big task of adapting the standard secondary subjects to the best advantage of the central purpose of the school. I speak from some years of experience when I say that while this is a difficult task it is a supremely interesting one, and, judging from the little we have accomplished in New York, it makes strong appeal even to those who administer the classical form of secondary education. In my own school each department is constantly at work upon the problem of making its work conform more and more to the needs of commercial training. For the men who are doing this there is a distinct educational gain which they are quick to acknowledge. They have the zeal of explorers into new fields.

In addition to this new method of treating old subjects, this recasting of the syllabus, as it were, there is the big opportunity the commercial school has of utilizing comparatively new secondary subjects. I have in mind economics and allied studies. Beginning with the industrial and commercial activities of the community in which the school is located, the study naturally expands into a survey of these activities in larger and larger areas until some appreciation of world commerce is gained. This sort of work is not to be hastily done out of a textbook crammed with all sorts of information chosen with more or less discrimination, but thru a study at first hand of the actual environment of the pupils and later with reports and other printed material now so abundantly provided by the government. Then there is the great field of business organization of constantly growing importance into which the pupil should have glimpses in order that he may fully appreciate how business is actually carried on.

It would be easy to enlarge upon these points but enough has been said, I hope, to make it clear that the specialized commercial school can enlarge the scope and enrich the content of the commercial course in a way and measure denied to the general high school whose aim is primarily general education. Such a school will have as its head a man whose business it is constantly to study ways and means for improving the effectiveness of his institution in its work of training young people for business. He will see to it that every department of the school is contributing its share toward the central purpose of the school. The specialized school will point the way for the makers of commercial courses in the ordinary school. The latter will profit by the experiments of the former, and those schools where community conditions do not seem to warrant the establishment of a separate school will share in the benefits of the specialized work.

The only argument which I have heard seriously urged against the separate school is that it is unwise to separate our pupils into classes. It is better to have all educated under one roof even tho they pursue different courses, we are advised. That view is rapidly losing support. We are coming more and more to believe that our instruction should have a more definite goal, that we have already too long pursued the policy of assuming that one course of

education—or one course with slight variations—will do for all. We have talked long about the unwisdom of assuming that every boy and girl is to be prepared for college and at last we are about ready to add action to words. The best way to work out the problem of adapting instruction to vocational ends is, to my way of thinking, to give to special schools the task of studying the field and working out the means of instruction. In these special schools there will be wide ranges of social grade. The manual-training and commercial high school will attract pupils of all classes, and social distinctions will be no more important than they are in the regular high school. Given an inferior course of study and an inferior teaching force, the special school would suffer naturally, but with a well-planned course and a well-equipped teaching force, it will not suffer by comparison.

We are all familiar with the fact that for some time past there has been great tension between England and Germany. The probabilities of armed conflict between these two nations are seriously discussed. The real origin of the trouble we all know. England and Germany are commercial rivals and in the race for supremacy the latter country has made surprising gains upon the former. The growth of German trade and German commercial influence is astonishing. To what is it due? In no small measure the extremely efficient system of education in Germany, which makes generous and intelligent provision for industrial and commercial training, may be given the credit for Germany's enviable position today. The famous report of our Department of Commerce and Labor on industrial education in Germany showed how extensively and how adequately the Germans were utilizing education to improve every industry. Scattered thruout the empire are hundreds of special industrial schools. Commercial schools are likewise numerous. Only last summer I was told by a prominent German educator that it has become the ambition of every German city of importance to have its own commercial university. Only recently Mannheim, which is smaller than Denver, established a *Handelshochschule*. In England, on the contrary, one finds technical instruction, both industrial and commercial, far behind. The Germans are experts in whatever they undertake. They do not go at things in general. One has only to study the program of their commercial schools to realize how thoroly they have taken up the question of academic training for business. And the rapid growth of these schools would seem to indicate a great measure of success for their work. We are fortunate in this country, with its marvelous resources, not to be so hard pushed as are the Germans, but more and more as the years go by we shall have to make our education do for us what the Germans have made theirs do for them. We shall have to specialize our instruction in increasing degree. It is not too early to begin it now in the matter of commercial education.

POSSIBILITY OR DESIRABILITY OF A NATIONAL, UNIFORM SYSTEM OF STENOGRAPHY

MISS ELIZABETH VAN SANT, VAN SANT SCHOOL OF SHORTHAND, OMAHA, NEBR.

In a country where the greatest possible liberty, not only of life, but of opinions, is allowed, it is safe to say that a universal system of anything is impossible. Men cannot agree even on matters which are susceptible of reasonably scientific proof. An example of this is seen in the various methods of treating the sick, each with its many advocates. We have many religious sects, and liberty is accorded to all.

Shorthand history dates back to the days of Cicero, and there is evidence that it was used before his time. In England alone there were over seventy-five systems known before the days of Isaac Pitman, and there have been scores of systems invented since. They vary as much as the varied languages of the earth, but all aim toward one end—a quick method of expression adapted to recording the utterances of a speaker.

When Isaac Pitman first devised his system of shorthand in 1837, he thought it would become a universal method of writing, not merely for verbatim reporting, but also as a means of communication to take the place of the laborious longhand. He would have had it taught in the schools of England to every child, and when once a knowledge of it had been spread thruout the kingdom, letters would be written in shorthand instead of longhand. This was the object of the "corresponding style" of writing—a style especially adapted to the writing of letters by one person to be read by another. It was not intended that this corresponding style should have the speed of speech, but rather that it should provide a legible method of writing which should be far briefer than longhand. This ambition of Mr. Pitman proved to be a dream, and later the system was adapted to amanuensis work and verbatim reporting.

Benn Pitman, a brother of Isaac Pitman, came to this country and brought with him a knowledge of his brother's system. He published a manual on shorthand in 1855.

The copyright laws of this country do not permit the copyrighting of a system, but only of the words in which its principles are stated. Hence it was possible for others to avail themselves of the material furnished by the Pitmans and to devise systems to which they gave their own names, but which in reality are largely Pitman. There are more than a score of these offshoots from the Pitman, and all are embraced under the common name, "Pitmanic systems."

While our copyright law may work some individual wrongs, it certainly promotes progress. An author, once safely ensconced behind an impregnable copyright which protected everything he had devised, would be very apt to settle down and rest content with his handiwork. But under our copyright law any person can take a system of shorthand, or so much of it as he cares to use, and modify, add to, or subtract from it, and publish the work as his own. It then behooves an author to keep moving with the advance of thought

along shorthand lines. There have been many new systems not based on Pitmanic shorthand, but none of these is exempt from the hands of those who wish to take the material which has been provided and attempt its perfection according to their own ideas.

If we were to attempt the selection of a national, uniform system of stenography, we should probably be forced to choose among the systems already existing. If it could be agreed by those who use shorthand that a national system ought to be adopted, the first problem that would arise would be the selection of a committee competent to judge as to which system it should be. Almost every writer of shorthand is convinced that he is writing the best system now in existence, and he will defend it with an almost religious zeal. "What system do you write?" is the text for many a heated discussion. Practically every system has some points of superiority over others. This fact is the only excuse for its existence, and it makes it possible for the author to compare it with another and to make a showing which is altogether favorable to his own.

It is difficult to see how from a practical standpoint a national system could be adopted. If such a thing were attempted it would be in danger of degenerating into a contest of publishers. The only solution would be for the government to take it in hand and assume control in the same way that it now has exclusive control of the carrying of the mails.

If, today, all the preliminaries had been settled and a national system agreed upon, unless a penalty were imposed and enforced for using other systems, it would be but a short time until there would be as wide a divergence as ever. Shorthand is too much a matter of opinion to be subject to legislation.

But even if it were possible to decide upon a system and to enforce its use, would it be desirable? There are doubtless many arguments which can be advanced in favor of a national system. It would simplify the employment of commercial teachers. It would enable students to change from one school to another or from one city to another without inconvenience. It might often be an advantage to employers, if stenographers were able to read one another's notes.

The shorthand most in use today is only about three-quarters of a century old. By a strenuous effort the most skillful writers can for a short time report verbatim the most rapid speakers. But it is not beyond the range of human possibility that a hundred years from now shorthand will be so improved that the most rapid speakers can be reported easily. This may be done by the improvement of systems now in existence, or by the invention of a mode of expression different from any of those now in use. No system can spring into existence in a perfect condition. Time reveals its weaknesses, and the practical test of use makes it possible to go on adding to its efficiency, until in the end a system may be evolved which will meet all the requirements of the most exact and rapid reporting.

Shorthand has now become a factor in business of all kinds. Thousands

of minds are thinking along this line, and the result of this thought may be a vast improvement.

No system is as yet so perfect as to entitle it to universal adoption. The number of stenographers in this country who can record the utterances of a very fast speaker, who uses technical or scientific terms, may be counted on one's fingers. There are many who can report a fast speaker, who uses the common words of the language, but not one stenographer in a thousand can do good verbatim work if the speaker approximates two hundred words a minute, and uses a large vocabulary.

Until a system is devised by which one of ordinary ability can acquire a speed which will enable him to follow a rapid speaker and record his every utterance so that every word may be positively known without the aid of memory or reference to context, we shall not have a system worthy of universal adoption. An attempt to make any system of shorthand standard and universal would discourage the efforts thru which the most perfect system of brief writing may be evolved at some future day. When a system possessing the necessary qualities is evolved or invented, the world will be ready enough to adopt it without the aid of legislation. Its superiority would be so apparent that it would by the natural process of evolution displace the system with less merit. It would become universal on the principle of the "survival of the fittest."

DEPARTMENT OF CHILD STUDY

SECRETARY'S MINUTES

OFFICERS

President—GEORGE E. JOHNSON, superintendent of Playground Association, Pittsburg, Pa.

Vice-President—A. CASWELL ELLIS, professor of education, University of Texas, Austin, Texas.

Secretary—WILL GRANT CHAMBERS, professor of education, University of Pittsburgh, Pittsburg, Pa.

FIRST SESSION.—TUESDAY AFTERNOON, JULY 6, 1909

The Department of Child Study met in the Central Presbyterian Church in joint session with the Departments of Physical Education and of Women's Organizations, and was called to order at 2:30 by the President, George E. Johnson.

After some introductory remarks by the president, and announcements by the chairman of the local committee, the first paper of the program was presented by Will Grant Chambers, professor of education University of Pittsburgh, Pittsburg, Pa., on "Why Children Play."

In the absence of the third speaker of the program, the president announced that Luther H. Gulick, president of the American Playground Association, New York City, would occupy the time allotted to the second and third papers. Dr. Gulick spoke on the subject, "What Children Play."

A brief and animated discussion followed the presentation of these papers.

A Committee on Nominations was appointed by the president, as follows:

Sanford Bell, Denver, Colo.

Mrs. Sarah Platt Decker, Denver, Colo.

William W. Hastings, Springfield, Mass.

The department then adjourned.

SECOND SESSION.—THURSDAY AFTERNOON, JULY 8

The department was called to order at 2:30 by the president.

The program was introduced by a vocal solo by Dr. Vere D. Richards.

Sanford Bell, editor of *The Rocky Mountain Educator*, Denver, Colo., read a paper on "The Child in School Work."

"The Child in Industry" was the subject of an interesting paper by Owen R. Lovejoy, secretary of the National Child Labor Association, New York City.

After a brief discussion, the meeting adjourned.

THIRD SESSION.—FRIDAY AFTERNOON, JULY 9

The department was called to order for its last session at 2:30 in the Central Presbyterian Church by the president.

After several vocal selections by a local singer, and a brief résumé of the first and second programs of the department by President Johnson, the first paper of the program, "The Child in the Group," was presented by J. H. White, professor of psychology and education, University of Pittsburgh, Pittsburg Pa.

Ben. B. Lindsey, judge of the Juvenile Court of Denver, gave the second paper of the afternoon on the subject, "The Child and the Community."

A brief discussion of Judge Lindsey's paper was indulged in, during which several questions were asked and answered.

The Nominating Committee then presented the following report:

For *President*—Will Grant Chambers, professor of education, University of Pittsburgh, Pittsburgh, Pa.

For *Vice-President*—A. H. Yoder, superintendent of schools, Tacoma, Wash.

For *Secretary*—C. B. Robertson, State Normal School, Cortland, N. Y.

The report of this committee was on motion unanimously adopted, and the nominees declared elected.

The department then adjourned.

WILL GRANT CHAMBERS, *Secretary*

PAPERS AND DISCUSSIONS

WHY CHILDREN PLAY

WILL GRANT CHAMBERS, PROFESSOR OF EDUCATION, UNIVERSITY OF PITTSBURGH, PITTSBURGH, PA.

Why *do* children play? Schiller and Spencer explain play as an excess of energy in the playing individual. The energy not used up in the vital and necessary activities of the organism is discharged into the muscles, and play is the result. Groos regards play as the functioning of instincts for which the organism has not, as yet, a serious need. For him the significance of play lies in its prospective reference; it is the development and practice of abilities for future use. Hall, as is well known, objects to this prospective emphasis and insists that play be explained in terms of its past. It is the functioning in the individual of racial activities many of which have long since ceased to be directly useful. The significance of play lies not in what it is to become, but in what it has been. Its satisfaction is historic rather than prophetic. Less well-known philosophers have offered other explanations which, at best, are but variations of those quoted.

Attempts have been made to explain play, also, by contrasting it with work. Thus Dewey writes: "In play the activity is its own end; in work an aim is sought beyond the activity. Play does not distinguish between the process and its product; work makes such a distinction and emphasizes the product." Others maintain that play is generalized activity while work is always specialized. And our own president, Mr. Johnson, has wisely suggested that perhaps the most fundamental distinction between play and work is the difference between the functioning of instinct and the functioning of habit.

But it is not from the philosophers that I have sought an answer to this question of why children play. If by a cause we mean that which is invariably associated, in the mind of the experient, with the occurrence of a given effect, it would seem the part of wisdom to inquire of the players themselves why they play. Tho the principle is not commonly recognized in educational practice, my studies of childhood have convinced me that the children themselves, in most cases at least, can give more satisfactory answers, for educational purposes, to questions concerning themselves, than the profoundest philosopher who fails to consult them.

To the children, therefore, I have turned for an answer. The public-school pupils of a Pennsylvania city were asked, "What game do you like to play best and why?" Written answers were received from 2,481 children ranging in age from six years to eighteen years, from 1,212 boys and 1,269 girls. A total of 280 different games was named by the children of all ages. The boys named 162 different games, the largest variety, 53, being named at age ten; the girls chose 186 different games, the largest group, 52, coming at age eight. The girls named a greater variety of games than the boys at every age between eight and sixteen inclusive, averaging 10 per cent. more games per capita; the boys tend, on the whole, to name fewer games with increasing age while the girls tend to name more.

At the risk of trespassing on the field of our second paper, "What Children Play," it seems desirable to make the following brief summary of the facts discovered in the classification of the games named by the children as their favorites: Outdoor games were preferred by 55½ per cent. of the children and indoor games by 22 per cent. The former tendency increases constantly after eight, while the latter diminishes to the thirteenth year, and then increases. Games which are necessarily social, that is, requiring the presence of other children, are named by 89½ per cent. of our contributors, while but 2 per cent. give evidence of preferring solitude, all being below the age of fourteen, and diminishing regularly in number after eight. The curve of social games begins with 75 per cent. at age six and runs about 90 per cent. after ten, reaching 100 per cent. at age sixteen.

Sixty-one per cent. like games involving physical activity and only 10½ per cent. prefer those which are chiefly mental, and the interesting, tho not altogether complimentary, fact about this last antithesis is that while preference for physical exercise gradually increases from 40 per cent. at seven to 81 per cent. at seventeen, mental recreations diminish in popularity from 13½ per cent. at eight and nine to 5½ per cent. at fourteen, increasing, however, during the next two years to 18 per cent. and again falling off. The relative popularity of games requiring motor skill is indicated by the votes of 41 per cent. of the writers. This is an increasing popularity, the curve rising from 27 per cent. at age nine, its lowest point, by a regular ascent to 72 per cent. at age seventeen and eighteen. The prominence of co-operative games at an early age is one of the surprises of this study. We have been encouraged by earlier studies to expect an extreme individualism in the games of the smaller children and a progressive development of co-operation in the later years. In the present study, 70 per cent. of the six-year-olds choose games which require co-operation, and the curve rises with only two slight depressions to 89 per cent. at eleven, 97 per cent. at fourteen, and 100 per cent. at sixteen.

Another surprise is the small proportion of rhythmic games mentioned. Only four boys and fifty-eight girls—about 2½ per cent. of the children—name games which are necessarily rhythmic, and five-sixths of these belong below age ten. Imitation and construction have but small places in the

preferences of these children; less than half of 1 per cent. name a constructive activity, and only 3 per cent. mention games which are consciously imitative.

Coming now to the reasons given by these children for their preferences, we approach more directly the answer to the question, "Why do children play?" First we discover that 11½ per cent. of them, found chiefly in the earliest years, attempt no answer. They cannot tell why they play. About 12 per cent., chiefly of the earlier ages, are satisfied with the very vague reason, "It is a nice game," or "It is a good game," or "I like it best." Another group of almost 15 per cent. name some characteristic of the game, as "Blind man's buff, because they tie up your eyes." The first associated idea which comes to mind is given as the justification for playing the game. This tendency is strongest at ages ten, eleven, and twelve. The next largest group play for the activity involved; 17 per cent. play because "There is running in it" or because "It is good exercise." This tendency culminates at age sixteen with 38 per cent. And the largest group of all, including nearly 21 per cent. of the children, play because "It is fun." To say that a game is "good fun" is to them an all-sufficient reason. This is a very popular reason from the ninth to the fourteenth year inclusive. As this "fun" curve drops after fourteen, another, closely related but representing a higher degree of discrimination, rises to take its place. This is the curve representing the answers, "It is interesting," and "It is exciting." From the fourteenth to the eighteenth year this group grows from 4 per cent. to 28½ per cent. Finally there are numerous scattering reasons, such as companionship, no running, quiet, gaining information, rivalry, easy to play, pecuniary gain, developing muscle, etc., given by from 10 per cent. to 12 per cent. of the children.

The principal sex differences brought out by this study are the following: Girls choose a larger variety of games than boys. Boys predominate in games involving physical exercise, in those requiring motor skill, in outdoor games and in solitary games. Girls lead in imitative games, in indoor games, in games involving mental effort, and in rhythmic games. In social games and in co-operative games there is no significant difference.

Now, if we bring this array of facts into relation to the various philosophies of play quoted in the beginning, what do we discover? We are driven, I think, to an acknowledgment that each of those theories is correct if it be regarded as a statement of a single point of view rather than as a comprehensive philosophy. And we are further persuaded of the necessity of a restatement of the theory of play which shall comprehend, but not necessarily in a single formula, all the partial statements which are justified by the facts. With this aim in view, then, let us briefly review these statements in the light of the discovered facts.

The surplus-energy theory of Schiller and Spencer receives no *direct* support from the answers of these children, tho there are certain implications in favor of it. The games chosen are chiefly those which require the expenditure of

a great deal of energy, which must be in excess of that required for the vital processes, since these processes continue without interruption. That the expenditure of energy in this form gives satisfaction is indicated by the fact that one-fifth of the boys and one-sixth of the girls give as their reason for playing their favorite game that there is running in it, or that it is good exercise. In addition to the implications in these statements we have the commonly recognized arguments that sick children have little inclination toward play, and that the period of greatest playfulness in life is also the time when organic conditions are most favorable to the protection of the surplus energy. It seems fair to say, then, that whether the presence of surplus energy be considered the inciting stimulus of play or not, it is certainly the means by which it is carried on.

That play is the functioning of nascent instincts, not yet, if ever to be, demanded for serious business, there is little room to doubt. This study and others have shown that play interests closely parallel the series of nascent instincts which has been worked out by genetic psychologists. Not to mention specific games, the present study shows the culminations of interest in certain types of games to assume the following order: (1) in the earliest years, indoor games, rhythmic games, imitative games, solitary games; (2) about the early teens, games of vigorous physical activity, outdoor games; (3) in the later teens, social games, co-operative games, games requiring motor skill, games chiefly intellectual. The relation of the games of these three periods to the nascency of instinct requires no elaboration.

But more convincing still is the evidence from the mental concomitants of play. The reasons which children give for their choice of games are indicative of strong impulse, intense feeling, and vivid but fleeting imagery; these are the psychic earmarks of instinctive action.

When we come to the issue between Groos and Hall as to whether play shall be characterized as the exercise of abilities for future use, or the practice of racial endowments for present satisfaction, this study lends its support to the latter. To be sure, there are evidences of differentiations of play which correspond to later differences of vocation; girls choose more rhythmic, indoor, imitative, and purely mental games than boys; boys name more outdoor, muscular, running games and those which require motor skill. But this does not mean so much that future work determines the nature of present play, as that present play so satisfies present needs as to make possible certain kinds of future action—be it work or play. On the other hand, our evidence is almost wholly negative as to any conscious relation in the minds of the children between present play and future utilitarian activity. Note this contrast in their reasons which indicate absorption in the game itself as opposed to those which look beyond the game: The groups headed "No reason;" "Names some characteristic of the game;" "There's running in it;" "It's good exercise;" "There's no running in it;" "It's a quiet game;" "It's a nice or good game;" "It's fun;" "It's interesting or exciting," and "I like it best," aggregate 83.3 per

cent.; while all the groups of reasons which could possibly be construed as having a future or utilitarian aim—"It is a source of knowledge;" "It requires skill or thought;" "It leads to possession or gain;" "It's healthy or develops muscle;" "It is morally good," and other utilitarian reasons—aggregate but 3 per cent. So far as the child knows his own mind, future utility has little to do with present play. One-fourth of 1 per cent. of the children name a game involving construction.

As for the relations between play and work, the conclusions already presented suggest that, whether the opposite characteristics be true of work or not, the classified play activities of these children seldom point to an end beyond the activities; that these play activities are diffuse and general rather than specialized, especially among the smaller children; and that play involves the functioning of native instinct rather than of acquired habits. There is little or no evidence in the natural plays of children of conflicting impulses which demand voluntary attention. It is the introduction of voluntary attention which transforms play into work. In play there may be a highly specialized motor and mental reaction at the center of things, but it is reinforced by the co-operative reaction of every part of the organism. The entire psychophysical system is involved. In work, a successful outcome implies that all unnecessary movements shall be inhibited, and all irrelevant associations shut out of consciousness; both the motor and mental stream must run in the narrowest possible channel direct to the goal. Play, on the other hand, is most joyous when its movements engage every muscle and its imagery is most varied and facile.

That play remains a much more general type of reaction than directly utilitarian activities, even in the later stages of its development, is easily demonstrated. Functional psychology teaches us that definiteness of one's mental processes is proportionate to the accuracy of his motor reactions. A high degree of specialization on the motor side conditions a high degree of specialization on the mental side. A bungling adjustment can produce naught but a clumsy percept. Now all studies that have been made of children's reasons for doing things show a distinct progress in their conception of "a reason" from year to year. No such marked development appears in the reasons given by children for their choice of games. Even the answers of most of the older children linger in the region of vague feeling or of chance association. I have already stated that more than 83 per cent. of the reasons given by children of this study are of this vague, accidental, or subjective sort, while but 3 per cent. are definite and objective. The culminations of the six main tendencies of the first sort are as follows: age six, no reason; age eight, "It's a nice or good game;" age eleven, "It's fun;" age twelve, some characteristic of the game given as reason; age sixteen, "There's running in it," or "It's good exercise;" age eighteen, "It is interesting or exciting." It is evident that not much progress has been made in the clarification or objectification of these answers in twelve years of school life. I am disposed to

believe that the best reason to be given by anyone for playing is a statement of general satisfaction.

If, then, we attempt an answer to the question why children play—we must frame that answer in accordance with these principles:

1. The answer must be twofold: it must include (a) the objective cause, that which is found to be invariably associated with play as part of an objective series; and (b) the subjective cause, that which is invariably associated with play, in the mind of the player, and serves as his justification of the play activity.

2. The answer must not be in terms of future consequences which are unforeseen by the player, nor yet in terms of a past utility which is no longer operative.

3. The answer must be in terms of the organism's present needs and satisfactions. Professor Dewey has strongly emphasized, in his educational philosophy, the necessity of relating the education of a child each day to the vital needs of the child on that day and of judging it by its immediate effects rather than by remote consequences. While the civilization of this present generation has undoubtedly grown out of the accomplishments of earlier generations, yet those earlier generations did not strive consciously for us; they were striving for the satisfaction of their own needs. And it would be no more correct to account for them in terms of us, than for us in terms of them.

Objectively, then, play is the functioning of neuro-muscular systems whose development is of supreme importance in the economy of organic life. In early life these systems are isolated, and often antagonistic to one another—fragments of what, in mature ancestors, were highly complex systems, functioning as important activities in their lives. But these minor fragmentary systems are selected and transmitted, not on account of their past value to the ancestors but on account of their value to their present bearers. Each new motor co-ordination we develop is built up out of the fragments of old co-ordinations. The old complex motor habits must disintegrate more or less completely before the new complex movements can be built up. Play reveals to the individual the fragments of ancestral adjustments which he has in his possession, for use as components of conduct; and it also serves to bring these components together into such new co-ordinations as are of greatest present value thru processes of selection and fusion. Figuratively speaking, play holds in solution the elements of ancestral activities, and precipitates now one adjustment and now another, according to the needs of the player. Because the play reaction involves all the neuro-muscular systems of the body, it results in the development of a unity, a wholeness, a completeness of co-operation of all parts of the organism which could be accomplished in no other way. It is for these reasons, speaking biologically, that children play.

Subjectively, children play because they enjoy it. I know of no better reason for a boy's playing ball than "It is fun," or for a girl's dressing dolls than "I like it." As the diffused motor reaction of play is the most promising for future efficiency, so the unspecialized pure joyousness, or sense of well-being, is the best start for mental sanity. Indeed, this heightened emotional tone is to the mental side what the diffused and energetic motor reaction is to the physical nature; it is the condition for vivid imagery, for rapid and varied

associations, thus making all of experience accessible to the needs of the moment. The completeness of co-ordination of the varied movements of the physical side of play is reflected in the unity and harmony of the vivid and facile imagery on the mental side. Indeed these may properly be regarded as obverse and reverse of the same condition. The heightened sense of well-being, the pure, objectless joy, which gives the consciousness of value to the child's play, is the survival in him of the lapsed precepts and images, of the fears and excitements which accompanied the ancestral activities of which his play is the expression. There is little of educative value in formal gymnastics or any kind of required physical exercise, because the soul is lacking. An hour of spontaneous play is worth a whole course of formal gymnastics, because the needs which play supplies are mental as well as physical.

Play is nature's great educator. It reveals to the child his possibilities for action and puts him in possession of racial experience in its most plastic form, without burdening him with ready-made adjustments or with obsolete systems of knowledge. He is the architect of his own fortune tho he builds his mansion from the ruins of ancestral palaces.

THE CHILD IN INDUSTRY

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The grouping of the program is an ideal one for the practical use of a child's employed time—school work, home work, industry. Its wise application, together with the recreation found in play, should provide the best preparation for those relations suggested in the subsequent topic, "The Child in Society."

But at present when we speak of industry, we mean commercial industry. The industry in which children chiefly engage in this country is not a concomitant of the other two, but a competitor. In fact, so rapacious a competitor is commercial industry, that it not only claims the lion's share of each day, but, wherever possible, it determines the bounds of the school term to its own advantage. As a result, we do not find this threefold opportunity open to all children, but a more or less sharp division: many enjoying the advantages of employment at school and at home; others consigned to the absorbing exactions of industrial pursuits.

The children of our country technically engaged in gainful occupations numbered, by the census returns of 1900, something more than 1,750,000. They are distributed in agriculture, domestic and personal service, trade and transportation, mechanical and manufacturing pursuits.

Critics of the active efforts to suppress child labor have assumed until recently that the employment of children in agriculture is unobjectionable. Recent information, however, collected from localities in which children are largely engaged in agriculture, reveals that in many of its forms such employment is fraught with serious objections.

The fruit-canning regions of New York have shown very young children at heavy tasks thru excessively long hours, and at meager wages, not for a few days of the summer vacation, as had been supposed, but thru many weeks, sometimes even seriously interfering with the spring and autumn months of school. In the growing beet-sugar industry of the middle and western states, conditions of very heavy labor are developing similar to those already revealed in vegetable-garden farms of the Atlantic seaboard states. The cultivation, harvesting, and stripping of tobacco utilizes the labor of children during the summer months, and often they are kept from school two or three days a week during winter when weather favors the further preparation of the tobacco.

Possibly the most injurious features of agricultural child labor are unsanitary conditions and congestion that prevail in the shanties, and the custom of employing children in large groups under overseers whose only interest is to secure the maximum profit. These features indicate a transition from old methods, when children were employed on their father's farm, to congregate methods so characteristic of nearly all modern industry, and call for an entirely new view of the child in agriculture.

In the other forms of employment referred to, especially trade and transportation and manufacturing and mechanical pursuits, there is little question as to the propriety of engaging very young children. At least that subject has become familiar and need not be reviewed here. Mines, quarries, glass factories, textile mills, shoe factories, cigar and cigarette factories, have been the themes of direct study in many recent discussions of child labor.

In addition to those more formal occupations, which preclude school attendance or even the enjoyment of home by daylight, there are other forms of work not practically included in the divisions named that have received little attention, and the serious nature of which has scarcely begun to be appreciated. These are employments which do not in their nature prevent school attendance, nor necessarily take the child from home. I refer to various street trades, and the household employment developed in the tenement sections of many larger cities. That practically no attention has been given to these industries is indicated by the census of 1900, which shows a total of 668 newscarriers and newsboys between ten and sixteen years of age for the entire United States. Only twelve cities are shown to have any. Of these, 111 were found in New York City. The same report shows a total of 260 artificial-flower makers between the same ages, all found in one city. Other manufacturing industries commonly pursued in tenements are as meagerly treated. The total for the United States is 3,430.

Not only are these figures ridiculously inadequate to tell the story, because by the nature of the census tabulation children who attend school are returned as school children and cannot be enumerated elsewhere, but the report further eliminates all under ten years of age. Evidently occupations in which enrolled school children are involved make a heavy drain upon children under that age in some localities.

As educators, the members of this Conference are particularly interested in the relation which industry, as applied to the child, bears to problems of education.

If nearly two million children are industrially employed to the exclusion of participation in educational opportunities, the situation is serious, unless it can be shown that industry itself gives that educational opportunity essential to the development of good citizenship.. When to this we add the effects of those forms of labor in which enrolled children engage, the situation is still further aggravated.

The subtraction of many thousand boys and girls from our schools at a time when their elementary education is only begun, and the constant invasion of the school to take out for a day or two at a time those who do attend, are familiar explanations of the state and government statistical reports on school attendance. These are further explained, especially in regions where vegetable, fruit, and fish canning prevail, by long vacations due to these seasonal trades.

But those reports can do little to reveal the domination of the school in some localities by controlling industrial enterprises, which not only destroy the home and mold the desires of children of school age, but, thru the influence of local school boards, dictate conditions under which the teaching force shall work. Neither can such reports throw much light on interference with scholarship, due to the exactions of morning and evening industry of newscarriers, messengers, milk-route boys, street-lamp lighters, coke-oven attendants, glass-house boys, and other school children to whom industry is theoretically only an avocation. Nor do they aid greatly in measuring the effects of four or five hours spent nightly by little girls in some cities in the manufacture of artificial flowers, clothing, hats, toys, and other articles of commerce, under the dim gaslight of unventilated tenement rooms, crowded to suffocation and often reeking with filth. A beginning is being made by studying the physical defects of school children, which will eventually bring to view the logical fruits of our policy of putting children into industry.

The physical, moral, economic, and other social effects of child labor are matters for the consideration of those specifically engaged in regulating this evil. Handicaps in later years from too early employment, preventing the adaptation of the worker to industrial opportunities, are beginning to be noted by those concerned with the economic nature of ethical questions. The problem of the unemployed, the casual worker, the unskilled and poorly paid laborer whose family maintenance is involved in the question of his early equipment, cannot be overlooked in a consideration of the nature and effects of child labor. But the problem for present discussion is the *educational effect* of the industrial employment of children. We are familiar with the old claim that children are better off at work than living in idleness. This has made a defense of general opposition to child-labor legislation. We challenge the assertion.

Were there anything in the industry itself to compensate for absence or

infrequency of school attendance, the situation would be less serious. But careful consideration of the industries which chiefly engage young children compels the opinion that in most of them there is little, and in many nothing, of educational value.

The principal professions and more intricate industrial branches require higher preparation than formerly because of increasing exactions thru specialization. In ordinary forms of labor, however, the reverse tendency appears. By the development of highly specialized machinery, decreasing demands are made on the strength or ability of the worker. The medical, legal, or educational specialist is the man who superimposes special training upon a broad general foundation. The industrial specialist usually becomes such by substituting the highly developed operation of a set of muscles for any general knowledge or appreciation of the processes in which he is but an insignificant mechanical part. The bearing of this principle on the industrial activities of children is significant. None of the higher branches of industry nor lines of professional activity could utilize the services of a very young child. The very nature of the chief occupations in which young children engage renders them devoid of the educational element. And the younger this specialization begins, the worse it is. Many find their early opportunity to work only a "blind alley" from which they are thrown out at eighteen or twenty years of age, unskilled, untrained, to join the army of the unemployed.

The direct effect upon the industrial development of the child and his consequent ability as a wage-earner is obvious. But not less important is the more subtle effect, of interest at present chiefly to the educator—the psychological effect upon the child.

Children enter industry not for training, not to learn habits of punctuality, neatness, thoroughness, system, but to get money. The financial return is the dominant motive. This is an important consideration in choosing a profession with those who have reached a degree of maturity, for we recognize the economic basis of most forms of useful success. But in the child this potent incentive operates not to elevate, but to thrust into positions that offer most immediate and satisfactory returns. Industry is a thing to be bought and sold.

Our most important and significant activities are industrial, and should be so adjusted as to contribute to general culture. To develop in the mind of a young child a keen appetite for wages regardless of the nature or quality of the work done is to rob industry of that educational value it rightly possesses. At present to the vast majority industry is simply a means of sustaining life and stands as an obstacle to progress either in art or character.

This perversion consigns multitudes to forms of drudgery, poorly paid, devoid of significance, and from which their every higher impulse struggles to be free. Its visible effects in those who have passed the period of childhood are familiar. Our city and village street-corners are thronged with youthful idlers sixteen to twenty-one years of age. To them work is a dreaded

penalty for being alive, which they propose to avert as long as possible. People in middle life have for the most part adjusted their bent shoulders to the heavy burdens and are trying with some degree of patience to meet the increased obligations, or they are victims of the rigors of hard work, broken in health, or crushed by accident. Beyond these, we find the logical sequel of our dominant policy in indigent old age, the crowning reward of hard and poorly paid toil.

The effect on industry itself is no less evident. It is a common observation that things are now made not to use, but to sell. The charge is not without foundation. Commercialized industry demands the largest returns from the investment and pays a premium to the workman who can make the most show, rather than to him who does the most conscientious work. The laborer inevitably responds to this stimulant, the result being the devotion of armies of workers to making articles of commerce which are comparatively worthless when made.

Further, in the exhaustion of the only reward of such labor by the purchase of things poorly and dishonestly made, the consumer plays an ever-losing game. In this, all are victims, but the poor especially, because to their lot falls most particularly the supply of overpriced articles, devoid of beauty, proportion, or reasonable utility.

Industry is the most fruitful field from which to harvest human culture, and an education that ignores it is not only defective, but unattractive to youth.

To combine book education with practical industrial processes is the ideal, conferring at once the most vital and most inexpensive system. The principle is already applied in well-equipped professional and technological schools in Cincinnati and a few other cities. But if it is proposed to apply it in the elementary and high-school grades, a new problem enters—namely, the adaptability and promise of the available industries. The working-out of the system is a problem for schoolmen; but it is the province of those familiar with child-employing industries to show how they cannot at present be worked into the scheme for the elementary grades, and the continuation school must find its place in our educational system for pupils of high-school years.

Let us frankly acknowledge that the factories which today can profit by the work of little children are those in which the kind of training we seek is not found. The wages of the child worker are meager, insufficient to maintain life. This is the least important fact, if the child were at the same time becoming trained. But the processes are extremely monotonous in character, prevent symmetrical mental or technical development, and the opportunities to pass from one branch to another, and thus gain an all-round training, are too few to be significant. Besides, the danger to morals, health, or life from many industries which would be the only available ones in certain localities bar them definitely as fit places for carrying on any kind of educational process.

Consider, for example, the glass industry, in which the only positions open

to young boys require their presence at night every alternate week. What intelligent parent would consent to the exposure of a boy of eight, ten, twelve, or fourteen years to the conditions in a typical glass-house? We need not enter into detail to describe the moral peril from association with men, intent on material rewards, and looking on the boy as a part of the money-making machine; or the physical cost of a system of night work which violates every known law of medical science. The child is trained to see how fast he can travel from the finisher to the annealing oven, taking an athletic exercise better taken in a well-equipped gymnasium, or still better an open field; or is trained to sit as long as he can, bent over an iron mold, which he opens and shuts, his shoulders bent forward, his lungs contracted, and his face bathed in scalding perspiration. Yet, if the factory is to be made the adjunct of the school, this is the only accessible opportunity in many communities.

Or consider the rumbling coal-breaker, in which ten thousand tons of coal a day are crushed in monster jaws and hurled down giant slides, to be picked and sorted for impurities by little boys who can neither see nor hear for the dust and roar. Shall the school in these communities utilize this to furnish that industrial training we are told must be had in the open market under competitive conditions, instead of in the school?

The chief textile industries present different conditions, but from the standpoint of the educator, not less serious. To become the expert attachment of a wonderful piece of machinery in a cotton mill is not the ideal we have in mind when we refer to industrial development. A child of eight years can learn to do that with profit to the employer in less than a month. Afterward, habit guides her accurately. Yet many are confined at such tasks for five or ten years, learning nothing, thinking nothing, breathing the moist air of the mill, and becoming reduced to the plane of machines. Undoubtedly higher ability comes with generations of specialization. A leading defender of child labor in his own southern cotton mills tells me the reason New England operatives are more skillful than the Southern is because children "inherit the knack of it." In other words, they inherit an industrial deformity. They can produce more with less mental or physical power.

In teaching trades to children, local industries should not be utilized unless they are proper ones. Teaching them in the schoolroom instead of the factory does not make them more desirable. There is no particular value in stimulating young children to recruit the ranks of already underpaid and overworked toilers in certain trades by giving them at public expense an initiation into the industry. Conceivably, arrangements could be made at slight expense to train children in the dominant industries of certain localities, thus making them at an earlier age skilled as textile workers, garment workers, hat, toy, box, and artificial-flower-factory operatives. But with what result? We relieve the manufacturer of the loss he now sustains thru inefficiency of beginners, and we aggravate the competition that has already placed these industries on the border between self-support and dependence.

The claim is made that industrial education should be self-supporting on the principle that children should be taught to make marketable goods in competition with prevailing factory conditions. That principle is sound as applied in higher industries, demanding skill, training, mental action, and commanding living wages. My point is that commercialized industries which can profitably utilize little children cannot be classed with industries that profitably utilize youth and adults. There is a fundamental distinction. The higher industries broaden and enrich life. These lower industries dwarf and impoverish. The returns to be sought from industrial training of children are indirect, in the development of citizenship.

Under existing conditions, and we fear for many years, the overwhelming majority must earn their livelihood in some of those mechanical forms of industry, which neither develop them physically, nor otherwise contribute to enriching their lives. We thus compel many, in the words of John Stuart Mill, "to sacrifice themselves to their fellow-citizens and to prosperity." It may be asked, then, if these school children are ultimately to be ordinary factory employees, destined as mere cogs in a great machine, going faithfully to their monotonous machine-craft each morning, returning wearily at night, what profit in teaching them handicrafts in school? Why awaken a love for the beautiful, the well-created, if they must abandon it in later years? If they are to learn industry, should it not be practical? Should they not learn to produce goods that can compete with factory products in open market? This is, in fact, the same question in another form and the answer is no less definite.

Our aim is the equipment of the worker. Industry as a basis for usefulness and happiness must be impressed on childhood, not industry for the sake of money. Every child who goes out of our public schools should be industrially trained, not for the purpose of commercializing that training, but as an essential element in character development.

Such an underlying principle would break down the present tendency to class distinction, and the necessary training would be applied alike to rich and poor. Private schools offer an outlet for those whose opposition could not be surmounted. No boy or girl should fail to get mind and hands industrially trained so as readily to apply to such opportunities as will be presented, nor fail to secure that training which will make clear the dignity and honor of all forms of industrial labor.

There is another reason for teaching handicrafts to future machine craftsmen. To comprehend the economic value, as well as the general social value from this deliberate public investment in industrial training, we must imagine many thousands of such children sent forth from our schools as compared with those turned out today. We should note the revolt against conditions that prevail. We should inevitably witness the gradual development of industry congenial to the type of workmen produced. Generations of training may be necessary to accomplish this result and such a system will mean hardship for the pioneers.

It is our contention that such men and women as this training would produce cannot be reduced to mere machines. The frequently reduced to the necessity of performing unmeaning and monotonous tasks, the earlier ideals, the comprehension of the significance of industry in world development will be a continual and inspiring asset and will render them discontented with industry as it exists today and inspire them to transform it. Beyond this, a man industrially capable could not be driven to the extremes so frequent in labor disputes. That man is essentially a maniac who sees slipping from him the chance to drive pegs in a shoe, or run a stamping machine, or do some other trivial task which is the only thing he knows how to do, because that job stands between him and the hungry eyes of his children. But suppose him so intelligent in hands and brain that he can turn himself to any one of a dozen simpler branches of manufacture, he becomes at once able to discuss terms with his antagonist. The opposition of the trade-unionist, expressed in the statement that "the handy man" is the worst enemy of labor, is based on a judgment of present conditions, not at all upon conditions that would prevail under the system herein suggested. We are not advocating the development of thousands of workmen, each capable of doing many things indifferently; we are urging such development as will render industrial workers capable of doing a number of things well.

We spend millions of public and private funds every year to give our people education, and for the most part it is an education foreign to experience gleaned from other fields. This fundamental pedagogical element cannot be ignored, and when it so happens that the very experience most essential to human development, namely, industrial experience, is one fitted to pay its own way, why not avail ourselves of it to the fullest extent? In default of this we may exhaust our material resources in trying to educate our youth, but we shall not succeed. Education and life cannot be separated and our educational program must be an integral element of industrial life, not something superimposed.

THE CHILD IN THE GROUP

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Human nature everywhere, and at all times, has certain inherited tendencies which, thruout the life-history of the individual, constitute the essential motive powers of all thought and action. The hygienic development of the individual means a growth and an adjustment of these tendencies such as not only leads to the very ablest expression of every normal phase of the individual as such, but at the same time fits that individual to the interests of the group in which he lives. Whether it be the savage or the child, the only way that the individual's capacities, at first so rudimentarily instinctive, can be perfected in content, and that content then be brought into well-adjusted mental systems, is thru

life in the group, learning to think as the group thinks, to feel as the group feels, to do as the group does—learning the give-and-take of all normal life. The criterion by which every thought, every feeling, every action is determined, is not an individual, but an objective, social one.

If for any reason, whether it be the instability of the group or the fact that it is a group with which the individual cannot fall into reciprocal interaction, or whether it be the non-plastic condition of the individual himself, if for any reason the individual fails to get the needed mental discipline thru social intercourse with his fellows, we cannot hope to have an individual with capacities fully realized either as to self or society. He will be lacking in both the material content and the organization of his apperceptive systems, and in the more delicate and subtle feelings and emotions that always accompany them. He will be lacking also in his appreciation of the interests of his fellows, and in his ability to co-operate with them. The new psycho-genetic and pedagogical literature is just beginning to make clear the extreme importance of this social phase of education.

In a consideration of the child in the group certain large features of the problem suggest themselves at once.

First, The child has a long period of plasticity and educability. This is the period in which the big changes are wrought in the content and organization of his thought, feeling, and action. His capacities now become more or less fully realized.

Second, The child's environment from the beginning is social. He is from birth a member of a family and group whose customs are to become his customs, and whose laws are to become his laws. He is dependent not so much upon his bodily strength and instinctive capacities as he is upon his social environment. It is in his plastic period that he receives his "social inheritance." He learns intelligent and reflective co-operation. He learns his part in the clash of efforts and ideals necessary to all progress and at the same time finds in it all but the resultant of differing personalities, living by comradeships, sympathies, agreements, loves.

Third, The child has a social instinct that varies in its expression with the development of the child. Among his different hereditary tendencies, there is one that we may safely speak of as the social instinct. Because of the early association of that instinct with every form of thought, feeling, and action, it is the one that fits the child for that needed discipline which can come only thru contact with other minds. It holds the child to the group, that every tendency he has may be trained to its normal proportion. His assurance about his fellows arises by means of the very interests whereby he gradually comes to his own self-consciousness. If he be the only child in a family, whether his home be poor or good, he makes up almost a distinct class. "Mental and physical defects of a grave character are more common among only children than among other children." Their attendance at school, their success in school work, and their ability to take part in co-operative games are

all below the average. "Selfishness is the most frequently named of the worst traits." Many of these peculiar characteristics can be attributed directly to a lack of life in a group of his own age. A defective or a secluded child is always lacking both individually and socially. On the other hand, as Baldwin suggests, there is no one but has noted the remarkable sharpness and alertness of the street boys, who have gained much of that sharpness and alertness from their methods of life. The normally developed child in every case grows individually in direct proportion to his growth socially.

The social discipline that awakens and develops the child's every tendency begins in the home. It takes but a few months for him to distinguish the touch, the facial expression, and the voice of the mother or nurse. As President Hall says: "She, for a time, embodies his entire world of others . . . and from her all other persons are learned and differentiated." All his earliest experiences are under the guidance of persons, and he becomes so accustomed to associating persons with things that, much as the race at one time did, he shows the tendency to think in personal terms. It is a long time before he is able clearly to distinguish between the personal and the non-personal elements of his experience.

The young child up to ten or eleven necessarily has interests in what to the mature person might amount to but little or nothing. His physical and mental capacities are still those of a child, and yet their exercise calls for that reinforcement, by actual recognition from others, that means so much to the little child. At this time when alone, especially if an only child, he is having his imaginary companions, and his day dreams are beginning. Curiosity is playing as great a rôle, perhaps, in arousing the social sense as does recognition. The questioning period is always the period of most rapid growth in social insight.

Soon the home shares the time of the child with the school and the church, and with groups here and there on the playground. The child's emotional and intellectual interests are rapidly widening, always accompanied by a parallel growth in social breadth. The boy's interests broaden beyond the narrow bounds of the home and the school, and he enters the larger social world of the street and the gang. He is ready to advance into more elaborate phases of self-consciousness and social consciousness. He becomes an active member of one or more spontaneous organizations. He is just on the border of adolescence. His "unselfing" begins. His day dreams take on more venturesome characteristics and result in larger plans and ideals. Team work now characterizes his plays and games. A gradually increasing interest is shown in all kinds of social affairs and in the other sex. He has new things to show off now. His social discipline thus far has carried him beyond the stage of asking recognition for some newly mastered physical or mental feat to things that have greater social value, as physical strength, agility, endurance; keenness of perception, retentiveness of memory, accuracy of judgment, power of critical analysis; ability to excel in debate, oratory, music, or other

accomplishments; scholarship; wealth; family connections; ancestry. But these are only transitional phenomena and the greatest care must be taken that there be no arrest at this stage of the child's development. There is an important social gauntlet yet to run. This individual must be brought to see that the real worth of a man depends not so much upon the exceptional capabilities he has, as upon the worthy use he makes of them. His sense of personal responsibility becomes larger, more self-sustaining, more reflective, thus showing that his social and moral self has reached a rather high degree of development. He is now ready to enter into purposeful co-operation with the group or groups in which he is to live.

Fourth, The child when alone is a different individual from the same child in a group. Everyone has observed how thoughts, feelings, and actions vary in the various groups of which he is a member. Place a mature man, for example a professional man, in his home group, before his students in the lecture-room, in the session of a scientific association, on a board of examiners, in a law-making assembly; place a young man, say a student, alone with his books, in the classroom with lecturer and classmates, with fellows in a student's lodging, or on a walk; place a child alone in a room, on the playground with other children, in the family, in the school; and that man, that youth, that child will be a different individual according to the different respective positions in which we have placed him. He will show different thoughts and feelings, different capacities, different morals and intelligence.

When it comes to the matter of school children at the middle of the plastic period performing a simple physical act, such as turning a reel at the highest rate of speed, careful experiments have shown that when a coworker is present, besides the organic changes such as labored breathing, greater rigidity of muscles, and flushed faces, there is also an increase in the amount of work done. The dynamometer and the ergograph have been used in experiments on the individual alone and in a group showing the same results, and they further show the marked influence of muscular and word-suggestion in increasing the amount of work done. Meuman finds that without a single exception children when working in a group remember considerably more than when alone. He reaches the general conclusion that with every change in the external situation—in the coworkers present, in the suggestions given by the experimenter—the amount of work is altered in a typical manner, and these changes appear in the same way in the case of children of different ages, altho they are larger in the case of younger children. The long series of memory tests by Lippman, by Stern, and by Borst corroborate Meuman's results in a striking manner. Mayer, with this same problem in mind, made investigations regarding the ability to do school work, endeavoring to determine whether, and under what conditions, the work of pupils in a group gives better results than the work of the same pupils when isolated. With twelve-year-old boys as subjects he used such tests as dictation, mental arithmetic, memory tests, the Ebbinghaus combination test, and written arithmetic. He found in general that the work

of the pupils in groups is superior to their work as individuals. This was apparent not only in the decrease of time but in the superior quality of work done.

We see therefore from both the observational and experimental phases of this problem, so far as we have results, that the child varies according to whether he is alone or in a group, and varies more or less in certain definite directions.

When we take into consideration the fact that the child brought up alone can never come to a proper understanding of himself; that he has a social instinct and a limited plastic period in which his hereditary equipment, if ever, is brought to its realization; that his environment from the beginning is social and that his response to it in thought, feeling, and action varies with his development; that when in a group he is a different individual from what he is when alone, more apt, both physically and mentally; when we take into consideration all these facts and the related ones, we begin to realize the immense significance of the problem of the child in the group. We begin to realize how incalculable would be the value of the solution to this problem and the right application of that solution in the home, in the school, and in society.

We can say nothing final now. The problem of the child in the group is still in the experimental stage. The many arguments for and against class-teaching are still very largely matters of opinion. The many attempts in self-government and related endeavors in this country and in Europe are only tests. The laboratory experiments mentioned above are but the initial steps in the investigation of the problem and so do not pretend to give conclusive evidence. The problem is still unsolved. However, we have gone sufficiently far in its investigation and the investigation of related phenomena that we can say with a fair amount of assurance that so far as the practical application of the results are concerned, it should be our attempt not to destroy this grouping instinct, but to learn how best to turn it to a good advantage in the proper training of our children.

THE CHILD AND THE COMMUNITY

BEN. B. LINDSEY, JUDGE OF THE JUVENILE COURT, DENVER, COLO.

I am taking for my text a recent case in the juvenile court, for I know of no better way to emphasize the relation of the child in the community than thru dealing with some concrete cases that constantly face the officers of that court.

Ten or twelve little fellows ranging in age from nine to thirteen years were complained of by a woman of the neighborhood. She said they swore at her, and when she passed them on the street accosted her with vile epithets and otherwise made her life a burden. She was confident that all of these boys were little limbs of Satan, without home or school training, and only fit for the reform school. The better part of her backyard was given over to a

chicken coop. They had killed one of her chickens, and the long string of complaints against these youngsters made what appeared to be a *prima facie* case of lawlessness that was a disgrace to all of their training. The little culprits, arraigned in court and relieved of their terror, developed an advocate in a little eleven-year-old. His explanations were typical of that frequent, and, on the part of the child, unconscious indictment of the community and the individual in the community. "It was this way, Judge," he said, "you see the only place we have to play ball is back of her house, and sometimes we knocks the ball in her yard, and when we goes over there to get it she threatens to have us arrested. She calls us all kinds of names, and once she grabbed our ball and wouldn't give it back to us." More or less terrified when the officer was called in, the youngsters all denied that they had called "the lady" any names. The ball had struck one of the complainant's chickens, and there was a demand also that the boys or their parents be compelled to pay for the chicken, and the complainant fixed the value of the chicken at \$3.00. She explained with great detail that the chicken was a pullet, which she said was different from a hen, and, because of its youth, worth much more than a hen. However much we may admit a certain amount of natural or even vicious rowdiness on the part of boys, my own experience with so-called juvenile lawlessness of this kind has convinced me that the great number of cases involve just as much, if not more, fault on the part of the community and the attitude of the individual in the community toward the child than the child itself. Of course, we may question the wisdom of using this as an excuse to be availed of by the child; but in spite of all of our efforts to avoid any such attitude which might encourage rather than discourage lawlessness, the average twelve-year-old American boy inherently and naturally sees and feels the injustice involved. No person has a keener sense of justice than a child. Observe the cross-examination by the little advocate:

"Haven't we got a right to play ball?"

"Yes, but you mustn't disturb Mrs. Jones."

"But we couldn't help the ball going over in her yard."

"But you must be very careful not to bat the ball in that direction; you might break her window or kill her chickens."

"But we can't help the ball going over there sometimes—and has she any right to keep our ball, because when I asked her for it she just called me all kinds of names and said she would have us arrested?"

And so the colloquy continues. If it wasn't for the danger of being misunderstood, and of course the unwisdom of any such statement in the presence of these boys, I, as a just judge, might very properly have responded: "Yes, you have a perfect right to play ball. If the city, if the community in which you live hasn't provided you a playground within a reasonable distance of your homes, and the vacant lot adjoining Mrs. Jones' place is the only ball-grounds you have, or if the street is the only place to play, then play in the Jones' lot or play in the street, but, whatever you do, play ball. If the ball

accidently goes in Mrs. Jones' backyard, and she doesn't return it to you but keeps it, we will send an officer to Mrs. Jones' house and demand that she return that ball or be prosecuted for larceny. If Mrs. Jones is so ignorant, so grouchy, so petulant, so absurd as to call you names and threaten you with the police and the jail I think you ought to be little gentlemen enough not to imitate her example in back talk; but if you swear back at her in the natural course of weak human nature, she got just what was coming to her, however distressing it may have been." Of course, my friends, this very righteous condemnation of the community for its attitude toward the child would have been received by a great many individuals as a plain case of encouraging lawlessness in the juvenile world, and the court would have been condemned accordingly.

I am not here to excuse the waywardness of the child in the community, much less to justify it; neither am I here to apologize for lawless little citizens, but I am here to point out that injustice of which we have had entirely too much in the past, which would seek to put upon the child burdens that properly belong to the community as a whole, and in too many cases are created by ignorance, selfishness, and injustice of the individuals of the community in dealing with childhood. It is only within recent years that the community has begun to awake to its responsibility as a community for the child. While responsibility rests most with the home and the parent, the home and the parent cannot do their full duty toward the child, nor the child receive the full measure of benefit from the teaching of the parent, unless the effort of the parent be supplemented by the community in the discharge of its duty toward the child. The cities in this country represent the highest development of community life. As it is the right of all men and women to found homes and rear children, so there comes a corresponding duty to every individual in the community, who may enjoy these rights, whether accepting them or not, to take some of the responsibility and cheerfully accept some of the hazards, the annoyances, and the difficulties that come to individuals because of necessary conditions of community life.

Just as, in return for the benefits thru the establishment of government and the maintenance of law, the individual must sacrifice some of his personal liberty and accept uncomplainingly and patriotically certain obligations and burdens of the community as a whole, so in return for the blessings of children must each individual and each community be willing to undergo uncomplainingly some reasonable sacrifice on behalf of the childhood of the community.

But in this respect how thoughtless and short-sighted we have all been in the past. I think we can say without boasting that our own beautiful city has, as much as any city in this country, done its part for its children; but I recall very well within much less than ten years appearing before the Park Board to advocate public playgrounds, to be met with cynical indifference by the then members of the Board and to have it pointed out to me, as the consoling answer to our pleas, that there were enough vacant blocks in Denver

for the children to play, or if there were none in the immediate neighborhood there must be some within a mile. "And," said one member of the Board to me upon one occasion, "I frequently walked a mile to the old swimming-hole, and why can't the boys in the district walk a mile, if necessary, to the baseball grounds?" Another argument was something like this: "Where is this thing going to end? If we provide playgrounds for these kids what is to prevent the demand that we provide other things?" "Yes," we replied, "there is nothing to prevent it, but everything to demand it. We want a public natatorium, a public trade school, a recreation center, and if the children get hungry and the parents cannot feed them, we will in the end want you to do that—just that. In a word, there is absolutely nothing that the child needs which the parent for any fair reason cannot furnish, which it is not the duty of the community to supply."

It is very difficult to put any limit upon the duty of the community to the child. It is certainly coextensive with that of the parent, if there be no parent, or if the parent be helpless or the child suffer from the parents' neglect.

One of the greatest gains for the child is that which comes thru the conversion of the community to its duty toward the child. Nine-tenths of the work is done in bringing about the conversion. It had always been a theory of mine, for example, in the early fights for public playgrounds and public baths, that when the first appropriation came for these things, when the city authorities intrusted with the money and power of the people to establish them took the first step, made the first appropriation, builded the first playground, the first natatorium, nine-tenths of the work was done. After that it was only a question of the momentum that would be gained thru the force of the principle finally accepted. I have not been disappointed in this theory; on the contrary it has been more than demonstrated in this community, and I believe in other communities. There was a time when we had to go before the Park Board with statistics in an appeal to the pocketbook to show how it had cost this city and county \$40,000 in one year for prosecutions of juveniles in courts and their care in institutions, largely because the community had failed in its duty toward the child. There were at that time no public playgrounds, no natatoriums, and such complaints as that I have referred to were constant. The police were burdened with complaints from prudish people against the naked little kids in every convenient puddle, swimming-hole, or wading-place in the city. In the early days of our court we let the little boys in scanty attire bathe in the fountain pools in our court-house yard on the theory that a community which could afford thousands of dollars every year in maintenance and decoration of aluminum nymphs and statues of nude women sporting themselves in expensive artificial showers, could at least provide something of the kind for needy flesh and blood that clothed the human souls of its future citizens. Prudish people would come for blocks out of their way to gaze upon the half-clad youngsters, who were so much more shocking than the naked statues that never drew a protest; and upon their complaint the police

would chase the dripping live-nymphs, who not only didn't have to be brought to our court, but took refuge there, assured of protection. In those days it was hard to make the dull-minded understand the value of a heroic effort to arouse the community to its responsibility for the child and the natural normal pleasures of the child that, unless permitted a natural outlet, are sure to express themselves in lawlessness. But the lesson worked. The same city government that first pooh-poohed our demands responded to the demands of public education, that came with public agitation, with the playgrounds and the public bath, whereas, before they were educated, before they felt the pressure of public sentiment (which is only public education), they were as dense as they were dumb to such appeals.

Such complaints as I have mentioned, such incipient lawlessness and many other examples of kindred nature which I could describe have either ceased or materially decreased just in proportion as the community has awakened to its own culpability, to its own part in the lawlessness of which it had complained and which it sought in the past to place alone upon the shoulders of the child.

In short, even at the expense of overlooking the child's part in the case, what we did was to indict before the bar of justice the community as a whole and that individual who thru selfishness or ignorance, and sometimes viciousness, was an infinitely more important person to be proceeded against than the child brought dripping from the public fountains by the policeman or deprived of his play in the neighborhood without a playground. Frequently there is in the complaint of the neighbor, who saw in the breaking of a window only juvenile lawlessness, mere personal selfishness and a disinclination to bear some burdens that rightly come with God-given rights and the advantages of community life.

In the cases I have described, as in most such cases, we find the child the most reasonable and the most just of all those involved. They readily agreed to pay "the lady" for the unfortunate pullet and promised solemnly to respect her privacy. I had merely reasoned with the little prisoners—conceding their rights and the "lady's" rights—bespeaking for her their patience and manly bearing under trying provocations. As the gang, restored to freedom, descended the Court House stairs the little advocate, voicing their united sentiment, piped back to the probation officer, "Say, tell the Judge we're very much obliged to him." But "the lady" saw in this appreciation of justice only encouragement of crime, for the policeman on the beat, knowing very well the attitude and ignorance of "the lady" and "no place to play" was the chief cause of the trouble, found it easier for his own relief to comfort "the lady" with the relieving assurance that it was "no use to arrest those kids, for the judge would only let 'em go."

If the child in the community is to have justice and the community itself is to be most relieved of those annoyances that come from the misdirected energy of youth, the individuals composing the community must be educated

to a better understanding of childhood. Most cases of so-called juvenile lawlessness in communities are merely cases of juvenile naturalness misunderstood or misdirected.

I recall two cases of what the boys call a "charivari." One developed half a dozen neighborhood rows; another lasting loyalty and friendships. In the one case it was resented with threats that incited a riot and in the other it was welcomed with the good humor that prompted it.

Such cases constantly remind us of the necessity for one of the greatest of all remedies for a certain kind of juvenile misunderstanding that so frequently provokes communities. I refer to that tact and kindliness that is born of a wise self-control in individuals. It is the foundation of the active and well-directed patience that is the most effective weapon in such cases. It promotes understanding rather than misunderstanding. It is the same wisdom that restrains the neighbor from chasing the small boy who rings the front door bell. It made a certain little mother master of a bad(?) gang, whose ravages of back porches brought complaints by the score to police and court. She did not threaten, she did not complain. One day while watching for the assault of the invaders of her backyard, she suddenly appeared smiling her sweetest smile, invited the whole gang in to partake freely of the ice cream they sought to steal, and ever after it was worth a good drubbing to any boy in that neighborhood to molest the back porch of the little mother. It may have been the loyalty of the savage, but it was loyalty, and loyalty is worth cultivating.

I am not suggesting this as the remedy, of course, for every such difficulty but as an example of the conquering spirit; I wish it could be more understood and applied in every community. If it is not more prevalent in the community's attitude toward the child it is because it is not more prevalent in other departments of life. All the courts or probation schemes on earth can never effectively correct the faults of the child so long as there remain the faults of those who deal with children in homes, in schools, in neighborhoods—in the community itself. There can be no court, no institution, for the protection of the community against the faults of children that is fair or just unless it carry with it powers for the protection of children against those who deal with them, and a part in the education of the community to its own responsibility for the child.

If the community is to assume a certain responsibility for the child it must exercise a certain supervision over the child, the parent, and the home. It must by wise laws, wisely enforced, see that the parent does not shirk, does not dodge, because purely in the interests of the homeless child or the child from the careless or helpless home it has to perform certain parental duties. This is being done by the contributory dependency and delinquency laws, and while somewhat new and poorly understood and enforced as yet, they bid fair to perform an important part in the solution of this great problem. But here, as everywhere, education offers our greatest hope for the future.

It is within much less than half a century that the community has awakened to its responsibility for the child, and I think we may safely assume that no more fundamental changes are possible in our present system of civilization and government than those that affect the home and the child, and the responsibility of the parent to the community for the child and the community to the child for itself.

DISCUSSION

WILLIAM RILEY CALLICOTTE, lecturer for Colorado State Bureau of Child and Animal Protection, Denver, Colo.—The teaching of the rights of children and the rights of dumb animals has never been recognized in our courses of study as it should be.

Man has arrogated to himself too much and ignored the rights of his humbler brothers.

We have much to learn from the barnyard, the field, and the forest.

The dumb animal has a right, the same as man, to life, liberty, and happiness, and it is the duty of man, the higher life, to see that he gets food, drink, shelter, and all that makes life enjoyable to the lower animal. The life of these lesser creatures must not be taken save for the absolute necessities of the higher life.

These principles should be taught regularly in our schools as other branches of study are taught, thus developing the child in kindness, love, and good-will toward all living creatures.

The rights of children and dumb animals are closely related, and may reasonably be considered together in a course of moral training.

Colorado has a State Bureau of Child and Animal Protection, and laws requiring instruction to be given in all public schools on the humane treatment of dumb animals.

I hope that this Association will give a place for a paper on "The Rights of Children and Dumb Animals" at our next session, as this subject cannot be neglected in moral training without seriously affecting the child.

DEPARTMENT OF PHYSICAL EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—WILLIAM W. HASTINGS, editor of *Hygiene and Physical Education*, Springfield, Mass.

Vice-President—W. P. BOWEN, professor of education, State Normal College, Ypsilanti, Mich.

Secretary—MRS. LORNA HIGBEE LELAND, playground organizer, Templeton, Mass.

FIRST SESSION.—TUESDAY AFTERNOON, JULY 6, 1909

The department held its sessions in the Woman's Club Rooms. The meeting was called to order by the president, William W. Hastings, who gave the opening address of the session, "The Place of Physical Education in the Field of Hygiene."

G. W. A. Luckey, professor of education, University of Nebraska, Lincoln, Nebr., read a paper upon the subject, "Should School Hygiene Become a Department of the Public-School System, and Physical Training Be Made a Sub-Department under School Hygiene?"

J. E. Peairs, member of the Board of Education, Pueblo, Colo., and Robert J. Aley, state superintendent of public instruction, Indianapolis, Ind., led in the discussion which followed.

The last paper on the program, "The Proper Balance between Mental and Muscular Training in the School Curriculum," was read by W. E. Garrison, president of New Mexico College of Agriculture and Mechanic Arts, Agricultural College, N. Mex., and the discussion was led by A. O. Thomas, president of the State Normal School, Kearney, Nebr.

The president appointed the following persons to act as a Committee on Nominations of Officers for the following year:

G. W. A. Luckey, Lincoln, Nebr.

Frank G. Bruner, Chicago, Ill.

William W. Hastings, Springfield, Mass.

The department then adjourned.

SECOND SESSION.—TUESDAY AFTERNOON, JULY 6, 1909

The department met in joint session with the Department of Child Study and the Department of Women's Organizations.

(For program see Department of Child Study.)

THIRD SESSION.—FRIDAY MORNING, JULY 9, 1909

The meeting was called to order at 9:30 by the president. The general topic for the session was "Athletic Organizations."

William F. Slocum, president of Colorado College, Colorado Springs, Colo., presented the first paper, entitled "Athletic Competition in College or Preparatory School, or Competition Preparatory to Entering College."

The discussion was led by William S. Sutton, professor of education, University of Texas, Austin, Tex.; and by Ira B. Fee, deputy superintendent of public instruction, Cheyenne, Wyo.

Charles E. Chadsey, superintendent of schools, Denver, Colo., and Mrs. Lorna Higbee Leland, playground architect and organizer, Templeton, Mass., gave addresses on "The Proper Relation of Organized Sports on Public Playgrounds and in Public Schools."

John Dietrich, superintendent of public schools, Pueblo, Colo., and E. C. Bishop,

state superintendent of public instruction, Lincoln, Nebr., presented papers on the topic, "How Should the Athletics of Both Men's and Boys' Departments of the Y. M. C. A. Supplement Those of the Public Schools?"

The discussion of these papers was led by William B. Newhall, physical director of the Y. M. C. A., Denver, Colo. A general discussion followed.

G. W. A. Luckey, chairman of the Nominating Committee, reported the following nominations for officers for the coming year:

For *President*, Clark W. Hetherington, director of physical education, University of Missouri, Columbia, Mo.

For *Vice-President*, Robert W. Aley, state superintendent of public instruction, Indianapolis, Ind.

For *Secretary*, Amy M. Homans, department of physical training, Wellesley College, Wellesley, Mass.

On motion, the report was unanimously adopted and the nominees declared elected.

MRS. LORNA HIGBEE LELAND, *Secretary*

PAPERS AND DISCUSSIONS

PRESIDENT'S ADDRESS: THE PLACE OF PHYSICAL EDUCATION IN THE FIELD OF HYGIENE

WILLIAM W. HASTINGS, EDITOR OF "HYGIENE AND PHYSICAL EDUCATION"
SPRINGFIELD, MASS.

The classification of a flower or an insect is exceedingly interesting in that it involves a knowledge of the total characteristics of the individual as well as the general characteristics of the genus and species to which it belongs. But the classification of a new science or a new art is even more interesting in that it involves not only the essential characteristics of this science or art but also its scope and its logical place in the whole field of education.

The principal difficulty in correctly defining the relationship between these two subjects lies mainly in the present confusion in definition of terms. There is no uncertainty about the meaning of the general term "hygiene," since manifestly it has to do with the promotion of those agencies which induce and preserve normal function in the human body; nor is there any difficulty about the definition of the various subdivisions of this subject. Natural hygiene is devoted to such agencies as air, water, soil, climate, etc., which provide a certain general environmental influence upon the health, growth, and development of man. Public hygiene or public sanitation deals with all matters relating to public health, concerning itself mainly with the prevention of disease; in crystallized form it is legislation for public health. School hygiene is concerned with those measures which are intended to insure normal health and growth in children; while personal hygiene, as the name indicates, outlines the personal obligation of each individual to his own body. It concerns itself with pure air, temperature, proper clothing, care of the skin, eyes, and ears, good food, sleep, and exercise.

Manifestly physical education sustains a vital relationship to personal

hygiene and to school hygiene. What the exact relationship is will depend upon the definition of physical education itself.

Various terms have been employed for the subject of physical education, such as physical training, physical culture, exercise for expression, health culture, gymnastics, and athletics. These terms are often used interchangeably. They are loosely defined according to the point of view of the writer and have each been made to include all the rest and sometimes to take in also the field of school hygiene and personal hygiene.

The recent duel for supremacy between school hygiene and physical education is amusing in places. It is still going on, and no one can prophesy which will ultimately prove to be the "dog and wag the tail," but at present physical education is making the most noise. Judging by the latter, one would infer that physical education is still the dog.

In the presidential address of a recent meeting of the National Physical Education Association, it is claimed that the advocates of physical education have been largely responsible for the development of all the recently organized movements along the line of athletics for boys and girls, playgrounds, school hygiene, municipal gymnasia, baths, social centers, etc. (We note in passing that the recent Congress of Charities Organizations makes practically the same claim.) Allow me to quote from the closing paragraph of the president's address: "We must press on with renewed vigor and enthusiasm until physical education—including physical instruction, play, medical inspection, physical examination, and hygiene—shall be fully co-ordinated with all educational procedure from the kindergarten to the university."

No fault should be found with this statement as such, but it is one thing to appropriate and use good things from the outside, like medical inspection, physical examination, and hygiene, and is another thing entirely to classify them as an integral part of physical education and subordinate to it, as many physical directors are now doing.

We sanction unreservedly the view that the physical director should be a hygienist and that he should use every known agency to promote health and organic vigor, but that does not render sanitary inspection a department of physical education any more than it renders it a department of school nursing. The fact of the matter is that school nursing and physical education in schools are both legitimately departments of school hygiene. Logically the physical director occupies the same relation to the director of school hygiene as the nurse does to the physician.

The physical director should know all these things and should practice all the things which he does practice for the benefit of the student-body, but I maintain that he should be called the director of hygiene and should have the training of the doctor of hygiene rather than that of the doctor of medicine or simply the director of gymnastics. This has been my view for a number of years, and I believe that it is sustained by recent developments. The only reason physical education has nominally absorbed all these functions

is because school hygiene and the office of director of school hygiene have not been created until recently and have therefore not asserted their legitimate place. Every physical director who is really up to date is virtually a director of hygiene.

At the same meeting of this National Physical Education Association another prominent physical educator made a very philosophical analysis of school hygiene and physical education, and gave a lucid statement of the comparative training and equipment of the teacher of school hygiene and the teacher of physical education. He closed with a very unique presentation of the dilemma. "If this department which I have discussed were called the Department of School Hygiene, what part or parts of the work would be left out? If this department were called the Department of Physical Education, what part or parts of the work which I have outlined would be left out? The fields of these two lines of work have broadened and overlapped until today they coincide. There can be no complete scheme of physical education without school hygiene." And conversely, we would add, there can be no complete scheme of school hygiene without physical education.

There has been presented to us here a double-headed Cerberus with only one tail to wag, a most happy solution if only the body and the tail are satisfied—but they are not likely to remain so. The logical relationship is bound to win out over the order of chronological development, for the latter is only accidental while the former is inherent in the nature of things.

Dr. Storey is pre-eminently a school hygienist and only needed to carry his argument one step farther and to assert the logical supremacy of school hygiene, and assume with appropriate modesty the right to swallow the other animal and dispose of him internally.

The term physical education as employed today by prevailing usage covers all forms of muscular exercise except that of manual training and industrial occupations.

Classified for convenience according to common terminology the following divisions are found: Medical gymnastics for the correction of diseases and deformities (a branch of orthopedics); corrective gymnastics, a branch of medical gymnastics, which concerns itself with the correction of defects of posture induced mainly by the school desk; educational gymnastics, movements intended for the development of facility in the use of various parts of the body; hygienic gymnastics, intended for the development of organic vigor; play, which has the same function and is really the natural form of exercise for the promotion of growth and development in children.

A more satisfactory classification, according to the purpose of the exercise and the ends sought, is as follows:

1. Neuro-muscular training, or psycho-motor training, as it is also called, which develops the finer muscular co-ordinations and gives the child ability to do things. This training is secured principally by the emphasis of educational gymnastics, altho play and other forms of exercise are also valuable.

2. Moral, volitional, or character-training, as it is variously termed. The type of exercise most calculated to develop this side of the child is athletics, games, or some form of play; but marching, educational gymnastics, and in fact, all forms of physical exercise which tend to develop quick and accurate judgment, self-control, prompt compliance with directions, are also effective in character-building. Organized athletics and games develop these same qualities, and in addition have a social and ethical value in the development of the spirit of co-operation, personal courage, and fearlessness, the sense of fairness, and the "give and take" so necessary in life itself.

3. And lastly and most important, exercise for organic vigor, including for children the promotion also of normal growth and development. The typical form of exercise for the production of organic vigor is play. As indicated above, this is the normal form of exercise for the child. Hygienic gymnastics is a good substitute in the case of the city child where opportunities for play are very limited.

In discussing this matter of classes of exercise, it will be seen, therefore, that exercises are all psycho-motor, all character-building, all conducive to organic vigor. The difference between them is simply one of emphasis, but this matter of emphasis constitutes a definite and real difference. It is evident also that the most important result which must be expected from physical education is organic vigor—the staying power for one's life-work. It is equally evident that the emphasis of this third form of physical education for health's sake gives practically all the results derived from the others and gives infinitely greater results than the emphasis of any other form of gymnastics. It was these forms of exercise which developed the perfect symmetry and strength of the ancient Greeks; it was these forms of exercise which made of the English people the political and commercial leaders of the modern world for so many centuries.

If, then, the production of organic vigor is the principal function of physical education and the emphasis must logically be placed on this division of the subject, the whole subject of physical education must be classified according to this preponderance of emphasis, as a department of hygiene, and physical education for schools becomes then logically a department of school hygiene.

The argument is even stronger from the practical point of view. There is great need today of centralization of administration for the sake of economy and for effectiveness. Medical inspection and other phases of school hygiene are often entirely separated from physical education. In other words, knowledge of the conditions is separated from the application of the remedies. Medical inspectors and physical directors have no vital contact or relationship in most cities, and the most effective work is therefore impossible.

Under the present conditions, meeting for mutual conference is the natural and immediate solution of the matter, but ultimately the department of school hygiene must absorb the department of physical education. This has been

done in Boston and St. Louis successfully. It will be found the most practicable solution of the whole question of relationship.

My point of view as to the real relationship of physical education to hygiene is indicated in the following extracts from *The Physical Director as a Hygienist*.

Physical education as a science is a department of hygiene. It is not an end in itself but a means to health and vigor. There is no branch of hygiene with which we are not concerned; no preventive agency which it is not our function to use. But we are naturally more concerned with personal hygiene than with natural and public hygiene; and of those subjects upon which we should be most capable of giving competent advice, diet, rest periods, and muscular activity are most vitally important. Upon these principally depend, not only the organic vigor, but the intellectuality and moral capacity of the child and the ultimate man. Of the three, diet and rest periods are in a sense negative or passive, recuperative factors, while muscular activity is positive, active, and creative and hence most important, but it is an entirely mistaken perspective which would emphasize any one of these factors to the exclusion of another.

Three years is the average length of time which we (as physical directors) may expect to have with gymnasium members. To cultivate in them during this time a half-dozen good hygienic habits is worth more to them in the long run of life than the whole three years of gymnastics. Teach them how to eat, to sleep, to use the daily tonic of the cool bath, to dress loosely and with adaptation, to care for the eyes, and above all to make a hobby of some outdoor game or sport—walking, running (cross-country), horseback riding, bicycling, golf, tennis, etc.—to cultivate this habit the year round or, better, to ride some hobby according to the season and ride it hard. Let the seasonal scent of the air bring on the spell of golf clubs, skates, or racquet, as it does football, peg tops, marbles, and baseball with the small boy. Fashions in gymnastics may come and go, but recreation must go on forever.

The greatest need of physical education today is for the creation of a Division of Physical Education under the United States Bureau of Education in charge of a specialist, to gather together the facts of this new science and to classify and organize them for the promotion of a national system of physical education, which shall have for its primary object the development of national health and racial vitality.

I trust that all members of this Association and speakers on the program will be able to remain for a very few minutes for the business meeting at the close of this session, in order to hear the reading of a brief report of the Committee on the Memorial to the United States Congress to constitute a Division of Physical Education under the United States Bureau of Education for the purpose of organizing and developing a national system of physical education.

The most important obligation rests upon presidents, principals, and superintendents of educational systems to study the problems of this most vital and basal subject of physical education at first hand, and to lend every energy available for the satisfactory solution of inefficiency and neglect wherever found. This Department of Physical Education of the National Education Association is for you to conduct more than it is for physical directors in educational institutions.

It is for this reason I have outlined programs for two successive years, principally for your benefit, and they have been manned chiefly from your

ranks, and not by physical directors. I would recommend the election of officers for the coming year largely from your number, for it is good sound executive judgment which this movement needs most, together with the assurance of cordial co-operation of supervisory agencies with the directors of hygiene and physical education who are actually doing the work. I trust that you will accept this responsibility.

*SHOULD SCHOOL HYGIENE BECOME A DEPARTMENT OF
THE PUBLIC-SCHOOL SYSTEM AND PHYSICAL TRAIN-
ING BE MADE A SUB-DEPARTMENT UNDER SCHOOL
HYGIENE?*

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In the development of the individual there are periods of growth and periods of rest, periods of progress or movement forward, and periods of lull or retrogression. The same is true of the race and nation, and probably equally true of mankind as a whole.

Civilization has been compared to a great desert in which there are many fertile spots or oases where the traveler is wont to stop to replenish his stores. The student of history finds these oases scattered all along the way, but to account for them or to cause them to occur more frequently in the future is a difficult problem. When the forces which make for growth and progress unite, we have springtime; when they are scattered, neutralizing one another, we have winter. Educationally the United States passed thru such a springtime between 1820 and 1850. This was a period of reconstruction in organization and administration, and, it seems to me, we are at present in the midst of another educational springtime which the future historian will record as an educational renaissance. Its beginning will date with the twentieth century and its field will cover the physical man as the old education has covered the intellectual man. This change is due to a belief in the biologic conception of education—that education is a growth, a development from within. It is a period of scientific discovery and of intellectual and moral readjustment. Education is conceived to be concerned with the development of the whole man and is meaningless and worthless when separated from true growth.

This change of thought is illustrated thru the changing curricula of elementary, secondary, and higher education. Fifty years ago the humanities were primal; today it is the sciences, or the former taught by methods of the latter. Then intellectual and knowing processes were the only concern of the teacher; today, it is health, strength, and motor activity that occupy chief place. It is not what one knows but what he does that measures his worth to society.

Again this change of thought is shown by the many new subjects and interests that have arisen to divert the attention of the teacher from the narrow

field that once was thought to be all-essential. Among these new interests one needs only to mention agricultural education, domestic science and home economics, manual-training and industrial education, physical education, including school and city playgrounds, school gardens and city-improvement societies, child-study associations, mothers' clubs and charity organizations, school hygiene, medical inspection, juvenile courts, and health leagues, to realize that we are entering a new era.

The change is due in part to scientific discoveries, in part to the natural and healthy awakening of the people, and, in part, is the result of necessity from the shifting of the population from rural to city life. At the beginning of the nineteenth century less than 4 per cent. of the people of the United States lived in cities of eight thousand or more; at its close the number had increased to over 33 per cent. If we include communities of twenty-five hundred and over, more than half of the entire population live in cities. In Rhode Island, 95 per cent. of the people live in cities of eight thousand or over; in Massachusetts, 91 per cent.; in New York, 72 per cent.; in Illinois, 54 per cent. The movement of the people from farm to city and the consequent congestion of population in large centers has made vital many problems which to a former generation were unknown. Another factor which adds greatly to the complexity of the situation is the number of foreigners that make up the body of the population. In all the large cities of the country from 70 to 80 per cent. of the population is of foreign parentage. The amalgamation of such a large number of people with ideas so different from our own is no easy task.

Education, while dynamic, is an applied science and as such must follow in the wake of other sciences. But in the development of a people there is a mutual interaction between knowing and doing. Necessity is the mother of invention, and the changed social and industrial condition of the people has brought home to us the need of a different education; hence the many new interests that have arisen to modify the curricula and confuse the teachers in their work. These new interests, however, are absolutely essential to the growth and perpetuity of the nation, and must become an integral part of our educational system.

The educator, physician, and student of social problems are fully awake to the situation; but tradition and the ignorance and indifference of the masses have caused us to hold on to the old, rather than to adjust ourselves to the truth of the new. What we need at present is not so much knowledge as the proper distribution of the knowledge we have. I think we agree that the first thing in the education of a people is health, and coupled with that healthy activity, which necessitate hygienic surroundings. We would send the whole boy to school and have him develop from within—physically, morally, mentally—as a single unit, in harmony with the laws of his being, and with an undivided purpose.

When we undertake to accomplish these ends we find that our educational

system is weak. We lack in the essentials—*health* and *healthly activity*. The congested condition of city life has made the school environment bad, when it is possible to make it the best in the world, and the change from farm to city has limited the motor activity of the child. The whole industrial life of the people has changed, and to the detriment of culture and true development. Formerly, the individual learned thru his occupation to do many things well; but today his occupation teaches him to do only a small part of one thing. In his work on *Adolescence*, Dr. G. Stanley Hall in mentioning this fact says:

In the modern shoe factory the individual does but one of the eighty-one stages or processes from a tanned hide to a finished shoe; and the man in a shirt-shop is one of thirty-nine, each of whom does as piecework a single step, requiring great exactness, speed, and skill, and who never knows how the whole shirt is made.

The individual never sees the finished product and can never measure the result of his work. There is no inspiration to come from the completed product nor the sense of responsibility in the result of his labor. We are beginning to appreciate the difficulties and are making strenuous efforts to overcome them.

For the sake of health we have medical inspection and school hygiene. For the sake of growth and motor activity we have the various forms of play and industrial education.

Medical inspection of schools has become an established fact in most of the leading countries of the world. In the United States seventy-five or more cities have systems of medical inspection of schools. In some states like Massachusetts there is a state law requiring such inspection of all schools. But the idea is new and by no means universal.

The whole subject of medical inspection and school hygiene is in a chaotic condition because of the formative period thru which it is passing. We believe in the principle and in its practical necessity, but how best to adapt it to our present complex system of education is a problem yet unsolved. As Dr. Gulick, in his recent work on *Medical Inspection of Schools*, says:

Two great forces have been making in America toward medical inspection of schools. On the one hand is medical science operating to protect the community through its boards of health, while on the other is educational science operating through the great school systems of the world and expressing itself through its more or less scientific departments of physical training.

The one is interested primarily in the health of the community, the detection and prevention of contagious diseases; the other in the education, health, and development of the individual. The field of the one is the whole community, but especially the adult community; the field of the other is the school, especially the earlier grades of the school. The interests are disparate and the problems too complex to be combined with advantage.

The medical inspection of schools should continue to be an important function of city boards of health; but there is another and more important field that needs to be covered in order to give to the rising generation the health and development which is theirs by right of birth and inheritance.

This field, it seems to me, can best be covered by establishing in the public-school system departments of school hygiene and giving to these the direction of physical training.

In most of our schools physical education has fallen far short of what was expected of it. Instead of corrective exercises for all we give special exercises to the few who are strong and able to star in feats of strength and skill. If the latter should be done why should the former be left undone? The purpose of physical education is health, strength, endurance, versatility, efficiency, character. But these qualities are so closely related to intelligence that they must go hand in hand with mental development. Hence the importance of having the hygienic condition of the child known by an expert and his plays directed intelligently toward corrective and health-giving processes. It is a well-established fact that the natural order of development is from fundamental to accessory. That means the larger muscles and coarser movements are fundamental, that they develop first and remain last. The tendency of education is to develop prematurely the accessory muscles, causing in after life great weakness, if not complete nervous breakdown. This tendency of the schools should be counteracted by exercises that give proper attention to the fundamental.

In the public schools of Chicago besides medical inspection there is a department of child study and pedagogic investigation which has been of much service and no doubt covers, in a way, the field that might be covered by departments of school hygiene. The larger systems of education might well have both, but in the smaller schools the two departments should be combined.

The experts in school hygiene should be under the authority of the school board and the direction of the superintendent, the same as other teachers of the force. They should have almost plenary power in the location and kind of school buildings to be added to the system. It is a lamentable fact that notwithstanding our present knowledge of lighting, heating, and ventilation, school boards go on constructing buildings similar to those of our fathers without bringing to bear a single scientific principle of recent years. This ought not to be. We ought to have in connection with every state board of education a department of school hygiene with one or more experts to whom the plan of every new school building of the state should be submitted, and no school building constructed without the advice and consent of the department. What is the value of knowledge if we do not use it, and why should innocent children be crowded together in poorly lighted and poorly ventilated rooms because an ignorant school board has been anxious to save a dollar in the construction?

Another function of the departments of school hygiene should be the annual complete examination of all the children, the object being to discover defects and weaknesses which, if known, might be entirely corrected or at least benefited. Such knowledge would aid in determining not only the amount but the

kind of work and play the child can do with profit. These physical measurements ought to bring to light defects and weaknesses of the eyes, ears, throat, teeth, lungs, heart, nerves, circulation, and digestion in time to correct them. This work the present teacher cannot do, and neither can the director of school hygiene unless he has been trained both as a physician and as a teacher. Here also we need close correlation with the department of physical education. The only way to correct habits and overcome faults of development is thru exercise, and this exercise must be adapted to the particular needs of the individual. Hence, the physical trainer, like the hygienic expert, must know thoroly the physical nature of the child before he prescribes the kind and amount of play and exercise.

Another duty of the departments of school hygiene should be the constant oversight of the hygienic conditions of the school when in session. The heating, ventilation, lighting, cleanliness, etc., will not take care of themselves, however perfect the system. The variation in these conditions during the day is often great, not only affecting the health but the mental and moral progress of the children. But few janitors have sufficient intelligence to keep the hygienic conditions of the schoolroom as they should be, and most teachers are equally ignorant along these lines. Besides, the attention of the teacher is so occupied with the intellectual work of the children that she becomes wholly oblivious to the hygienic conditions of the environment. During a single day the temperature of the schoolroom is apt to vary from 58 to 80 degrees, while the humidity of the air may vary from 25 to 65. Such variation is very detrimental to health and mental activity and should be prevented by the constant oversight of trained experts.

Another function of the departments of school hygiene should be to study, in connection with the teachers, the instruction and school work in so far as they affect the healthy development of the individual. In 1906-7 there were over seventeen million children in the elementary grades of the public schools, on whom were expended over \$330,000,000. The waste in this instruction is enormous, but it will be greatly reduced when our methods become more scientific. During the same year we expended on the prosecution and care of the criminal class \$220,000,000. Should we include the non-productive class of our civilization who become a constant drain on the nation, the loss would equal if not exceed \$500,000,000 annually. A large part of this drain is due to misfits, or physical and mental defects, that might have been avoided or corrected during the early period of school life if we had distributed our present knowledge of biologic laws more evenly thru our teaching force.

Another important function of the departments of school hygiene should be the instruction of the teachers, students, and parents on school hygiene, and social and personal hygiene. Our ignorance of the laws of health causes us frequently to live far short of the possibilities within our grasp, and ignorance of personal and social hygiene reduces the moral tone of the community. These problems cannot be handled to advantage except by the medical expert.

And finally, the departments of school hygiene should co-operate with boards of medical inspection in detecting and preventing contagious diseases. The boards of medical inspection become especially active during times of epidemic and contagion, but the departments of school hygiene should never cease their activity while children are growing. Like that of the parent and the teacher, theirs should be a constant care, the value of which is to be measured only by the influences of time and the tests which measure true service.

DISCUSSION

J. E. PEAIRS, M.D., member of the Board of Education, Pueblo, Colo.—The scholarly paper just presented is a particularly clear exposition of the subject. I agree heartily with the author's argument, and his conclusions. It remains for those on discussion to add, if possible, by way of illustration those things which will aid members of the convention to go out and arouse the public to a realization of existing conditions. For, after all, our final appeal is not to educational authority but to the people, for the will of the people is law. We must educate until the public, feeling that health is the greatest asset of any community, will demand what we may only suggest; will demand that the physical welfare of the child be not sacrificed for intellectual attainment; that pupils attain a certain physical standard (relative to natural physical characteristics) before passing from grade to grade or to graduation; that the teachers be healthy, vigorous individuals, and that, while the school must not infect the home, the home dare not infect the school. In fact, that the schools do everything that will naturally result from a department of hygiene and physical education in our public-school system.

There can be no human progress until human life is estimated at its full value. While former ages held life cheaply, our lack of appreciation is evidenced by the fact that one hundred thousand children of school age will die, this year, of preventable diseases, and further, that a much larger number will become defectives and ultimately dependents. We are told that enforced child labor pours into our population one-fourth million stunted beings each year, and that this almost inconceivable number is augmented by a vastly greater number of the defectives and dependents from our public schools.

The government spends two million dollars a year for protection against accidents at sea. The Department of Agriculture, during the past ten years, has spent on an average each year four and one-half millions of dollars to save elm trees from the attack of beetles, in combating the potato bug, in stamping out cholera in hogs, in checking the ravages of pleura-pneumonia in cattle; but, nationally, not a dollar to eradicate tuberculosis, humanity's greatest plague, which destroys nearly one-fifth of our population every ten years.

It is a truism to state that our greatest national asset is healthy human beings. Yet Congress recently refused to appropriate three thousand dollars for the expert study of children, while it readily granted twenty thousand dollars for the expert study of clams. However, the recent International Tuberculosis Congress is indicative of the changing estimate of the value put upon human life. This great philanthropic congress alone is enough to distinguish the twentieth century. It is an evidence of true human progress in the conservation of human beings. In the great business of a nation, even from an economic point of view, the most important and essential thing is that which conserves and makes more effective human life.

Dean Ward, of the University of Nebraska College of Medicine, presents the situation very effectively when he says: "The American people face four great unnecessary wastes: From preventable deaths; from preventable sickness; from preventable degeneracy and

inefficiency; and from preventable ignorance." He is optimistic, however, in his belief that prevention of the waste of ignorance means the prevention of the waste of inefficiency, sickness, and death.

Our school system is a necessary and compulsory part of our government for its own preservation. Practically one-fifth of our population is of school age, and according to tradition they are supposed to be educated physically, mentally, and morally. As a matter of fact there has never been any systematic physical education. This phase of education has been, and is, wholly incidental and subservient to intellectual attainment. There has been no time nor place for hygiene in our curriculum. Yet as the blossom and the fruit depend upon the tree, so mind and spirit depend upon the body.

During the last three centuries science has doubled the working life of the English-speaking people. Science within fifty years has made it possible for governments to save millions of lives. It may enhance the economic value of millions more, if governmental power will apply the known laws of preventive medicine and sanitation. A noted English biologist declares that all epidemic contagious diseases might be eradicated within fifty years. Witness the effectiveness of government sanitation and preventive medicine in the tropics, in Havana, in Panama, and in the Canal Zone.

Medical inspection—inefficient, hampered, powerless, and incidental as it is—as a prophylactic measure has resulted in unmeasurable good. Diseases of the eye, ear, nose, throat, teeth, and the grosser contagious diseases have been corrected or checked and conditions are vastly improved; but medical inspection must become direct physical examination if it is to diagnose the more insidious diseases of which tuberculosis is the most potent example for illustration. Only a department of hygiene and physical education with trained teachers and officers can cope with the situation.

We judge everything by comparison. Tuberculosis caused twice as many deaths last year in the United States as yellow fever has caused in a century preceding. Since the outbreak of the bubonic plague in India in 1896, it has not caused more deaths in ratio to the population than tuberculosis has caused in the United States. Double and triple the graves filled by lives lost in action or from wounds received in action during the four years' rebellion, and then you will not equal the number of graves filled by the victims of tuberculosis during the last four years. These contrasts picture the greatness of the task of the government and of the school system as the most vital and effective arm of the government.

The school disaster of Cleveland appalled and horrified us all. We held our little ones closer and saved no expense to make improbable a like disaster elsewhere. Yet a competent authority estimates that four disasters like that of Cleveland every school day would not equal the loss of life each year in children of school age.

When we know that this great loss of life is largely preventable—that it is not fore-ordained but is a great avoidable human waste—we ought to be appalled. Who is to blame? Who must answer for this crime of omission, in the great day when civilized nations are to be judged? Professor V. C. Vaughan, of Michigan University, answers this in a most dramatic way. He says: "To take the life of a fellow-man wilfully or maliciously is murder; to do so through ignorance or carelessness is manslaughter. The great majority of deaths from tuberculosis are due to manslaughter and this fact should be recognized." Is this scathing arraignment of Dr. Vaughan's applicable to us? Are we accessory to the crime of manslaughter? We are neither ignorant nor careless, but to arouse the public to an appreciation of the true situation, to overcome the inertia of ignorance has been, as yet, too great a task.

Centuries ago Athens recognized God's out-of-doors in her system of education, and in her playground schools she developed the highest type of physical and intellectual manhood the world has ever seen. The twentieth century has caught the real inspiration, the real meaning of the unsurpassed, classical Grecian education, and history repeats itself when great modern cities spend millions for playgrounds. We have millions for defense

from the economic waste of ignorance, inefficiency, sickness, and death, but not one cent for tribute.

ROBERT J. ALEY, state superintendent of public instruction, Indianapolis, Ind.—I might begin and close with the single word *yes*. I presume, however, that some reasons are wanted for the faith that is in me. Not having had the pleasure of reading Dr. Luckey's paper, I must give my notions independent of his.

No single subject is today attracting more attention than general hygiene. The strides that have been made in the fight with disease and the victories that have been won are nothing short of marvelous. The great work of today is directed toward the saving and prolonging of life. Boards of health everywhere are waging successful warfare against preventable diseases. The leaders in the science of medicine are rapidly extending the number of such diseases. In a not very distant future it is probable that all diseases will be in this class and that it will be a disgrace to be sick at all.

Many states, thru legislation, have taken advanced positions upon the subject of public health. Thru the examination and licensing of doctors, the inspection of all sorts of food stuffs, and the requirement that in all public buildings and tenements certain sanitary conditions be maintained, the citizen has had his chances to get sick greatly reduced.

People are just beginning to appreciate the economic value of good health. The employers of men are learning that with wholesome surroundings and proper health their workmen will multiply the output and increase the dividends. We are now sure that the sick man entails a double loss on society—the loss of his service and the loss of the service of his caretaker. In the close competition of the present such losses must be avoided.

We are generally agreed that all these forward movements must be continued and greatly augmented. More victories must be gained, better health secured, and the average length of life increased. Better and more stringent health laws must go upon our statutes and we must see that they are rigidly enforced.

In this forward movement the school can and should be the greatest factor. No progress is certain unless the people understand thoroly the reasons upon which it rests. The most intelligent health officers spend as much time educating the public as they use in specifically fighting disease. The ravages of the great white plague will never be stayed until all the people know the dangers of the disease and the means of preventing it. Hygiene should be made an important school study. Every child should be required to study it and to become familiar with the fundamental principles of health and sanitation.

School hygiene should confine itself to topics of real importance. The details of anatomy with its bewildering nomenclature have no place in the school course. They belong to the scientist and the doctor. The child needs to learn how to keep clean, how to care for his eyes and teeth, how to avoid contagious diseases, how to detect unsanitary conditions in public and private houses, how to select wholesome food, and why he should avoid narcotics and intoxicants. In addition he should be made so familiar with sexual anatomy, physiology, and hygiene that he will be safe amid the temptations of the social evils of the times.

That these ends may be reached, the programs of the elementary schools must make ample provision for the study of these topics. There should be regular instruction extending thru the fourth, fifth, sixth, and seventh grades. This instruction should be made so vital that every child will translate what he learns into personal results. Knowledge that does not result in corresponding action is worthless. Nothing will help so much in making the teaching effective as an enthusiastic teacher whose physical being and personal habits both bear out the doctrines that are taught.

The schoolhouse in all its appointments should represent the best that is known in hygiene and sanitation. A clean, well-ventilated schoolroom, a sanitary drinking fountain, a toilet room with modern conveniences, a playground well drained and artistically beautified, and provisions for the complete and frequent purification of all rooms will impress

upon every child of the school lessons that will be permanent. The schoolhouse and grounds should be object-lessons to all the country about.

If everything about the school is sanitary and hygienic, every child feels the good results and becomes an advocate of wholesome conditions. When such conditions exist, medical inspection of school children is easy. The people themselves will see its necessity and make a demand for it.

Every child has the divine right to be understood both physically and mentally. The understanding of his higher nature is impossible until we know thoroly his physical body. Hygiene as a school study helps to make officials more alert, parents more anxious for the welfare of their children, and the children themselves more pliable and more readily willing to form good health habits.

The Greeks attained a high state of civilization and became the leaders in all forms of art, literature, oratory, and government. They held the ascendancy so long as they kept beauty of form, symmetry of development, and health of body as results that must be reached by every citizen. When physical training was neglected all sorts of decay began. The example of the Greek and similar examples of other nations ought to teach that physical training, resting upon the fundamental truths that hygiene has found, should find a place in every school. This training should be so well directed and should be made to fit so exactly to individual needs that every child will leave school stronger than he entered. To a very marked degree, physical training is the laboratory of school hygiene. The study of hygiene without any appropriate physical training is just about as sensible as the study of physics without experiments, or the study of botany without plants. It is thru physical training that the child realizes that symmetry of form and strength of body that the study of hygiene has led him to know is his birthright.

We are now spending much money for the supervision and teaching of music, art, domestic science, agriculture, and manual training. These things are so good that we must spend still more for them. Our schools, however, will not be what they should be until they cost twice as much as they do now. A large part of this other half of cost should go to pay for the adequate supervision and teaching of hygiene and for the proper equipment of every school with apparatus and teachers of physical training. The school will indeed be the hope of the country when it improves the health of all the people, prolongs their lives, and gives them that wholesome optimism that comes to the man of perfect strength and symmetric form. This will be the result when school hygiene and physical training assume the importance in the school curriculum that of right belongs to them.

THE PROPER BALANCE BETWEEN MENTAL AND MUSCULAR TRAINING IN THE SCHOOL CURRICULUM

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The phraseology of my topic appears to take for granted some very fundamental and even revolutionary doctrines—namely, that there should be a place for physical training in the curriculum; that it should be, theoretically at least, co-ordinate with mental training, and that there should be an effort to construct a curriculum which would embody a fair balance between them. It would be superfluous to say that these exceptions are not generally granted, or at least not generally acted upon by the curriculum makers. In general, physical training has no place in the curriculum. It is therefore co-ordinate only with the other things that are left out entirely, and the question of balancing it with anything else does not receive consideration.

Even in those schools where there is regular physical-culture work under special teachers, the ordinary attitude of the school authorities is represented by: "Now, children, let us lay aside our books for a moment and open the windows and take a few deep breaths, and we will be better able to go on with our studies." That is to say, physical training, when it is considered at all, is usually considered as an interlude in the curriculum rather than a part of it. Children are stopped occasionally in their work to take some exercises and a few deep breaths just as they are stopped at noon to eat their dinners, the purpose being in both cases to maintain at least a minimum degree of physical fitness for mental work without any more real idea of training in the one case than in the other.

In high schools and colleges physical training occupies a somewhat more conspicuous place in the life of the institution, but is usually still more obviously outside of the curriculum than in the case of the grades. Here it is usually a question of athletics and sport, of recreation, of school or college spirit. Even in those institutions which maintain a well-equipped physical department and have required gymnasium work with the accompaniment of physical examinations, anthropometric charts, and special prescriptions for corrective exercises, this work is ordinarily considered as somewhat apart from the real curriculum. It is like the opening of the windows and taking a deep breath in the grades. It is intended to keep a student in good health while he is taking his college course, but it is not itself a part of the college course.

Speaking generally, we may say without substantial error that at the present time physical training is not in the school or college curriculum at all in any vital sense, and it is a fundamental necessity that it should be given a place not only in the life of the school, but in its curriculum.

The increasing emphasis which modern psychology and pedagogy place upon the significance of body ought to make it possible in the not distant future to give to the training of the body that place which it deserves in the total scheme of education. It would be commonplace to repeat what we all know perfectly well, that modern psychology is not so much the science of mind, as we used to be told, as it is the science of personality; that personality is distinctly a sensory-motor concept involving not only states of consciousness but processes of muscular and motor reaction. We do not make so much use as we used to of the old statement originally made in the interest of sound religion and the spiritual life, that "man is a soul and has a body." However, it may be said that in this present world man is a very interesting complex of soul and body, and that he is the body part of him just as much as he is the soul part. Browning, prophet in this as in most other things, says, "Her soul helps body more than body soul." The flabby muscle is closely akin to the flabby will, and the Hamlets who stand hesitant and wavering between their consciences and their tasks are suffering from a defect which has at least half of its roots in the physical organism. They have not developed the mental and muscular habits involved in translating ideas into acts. The man with a

thoroly healthy and efficient nervous system seldom goes far wrong. No man's morals can be much better than his nerves; and mental and muscular training must go together in the discipline and development of the nervous system.

The motto, "A sound mind in a sound body" is a good motto, but it must not be interpreted as one would say "good water in a silver pitcher." The sound mind cannot be wholly sound unless it is connected with a sound body. This conception of the essential unity of the personality and the closing of the gap between the intellectual and the physical, ought, I say, to give great encouragement to those who are trying to secure proper recognition for the physical side of education. It also presents a warning against a process of physical education which shall be narrowly physical, as the old scheme of things—perhaps we should say the present scheme—is narrowly intellectual. The student is not a disembodied spirit while he is studying mathematics, literature, and science, and he must not be considered as a de-spiritualized body while he is doing physical training. He is at all times a personality which feels things and acts.

In constructing a curriculum which shall include training of all the necessary kinds in proper proportion, it is necessary to consider the amount of training in the several subjects which the student gets outside of the curriculum. It is conceivable that there are some processes in which the child needs training which nevertheless need not enter into the curriculum at all, because they are sufficiently and satisfactorily taken care of outside of the school.

This principle is relied upon by a good many people as an argument against giving much attention to physical culture in schools. They admit that children need physical development, of course, but say that they get plenty of it outside of school hours, and that the play instinct can be depended upon to lead a child into all the physical services that he needs. The principle is sound but the application is fallacious. While it is true that the average boy gets considerable physical exercise in an incidental way, it is equally true that he seldom gets enough of it, and still more true that he does not get the right kind, and truest of all that he does not get it in its proper relation to the other elements and other activities of life, and so is not led to an understanding of the moral value and significance of clean, strong, and perfect manhood. It is for the special advocates of physical training to claim boldly that the incidental and miscellaneous exercises which a boy or girl gets out of school are just as inadequate to the proper development of the personality on its physical side as is the miscellaneous thinking and learning which a child does outside of school hours to the development of the personality on the mental side.

Some of our foremost educators have recently been lamenting the decline of intellectual interest in American colleges and the craze for athletics, which they consider partly the result, but chiefly the cause, of the decline in scholarship. The facts upon which this indictment of the colleges rests are too familiar and obvious to be disputed, and in view of this situation it may seem

that the time is not opportune for an appeal for an increase of emphasis upon physical culture. But let us have recourse to the homeopathic principle, "*Similia similibus curantur*," the free translation of which is, "The hair of the dog will cure the bite." If our colleges are suffering from too much of one kind of emphasis upon things physical, let us try more, but of another kind.

It is to be admitted freely that many of the defects of college life are connected more or less directly with athletics, but it can scarcely be said that they are due to the overwhelming zeal for training for bodily perfection. This being true, I repeat the suggestion that we need to have in both school and college, not less, but more, emphasis upon the physical side.

All education may be considered as a preparation to meet the emergencies of life. And, roughly speaking, the man who can meet the most emergencies and the most important emergencies in the most efficient way is the best educated man. Modern scientific pedagogy has gone far toward shaking our faith in the efficiency of general training thru formal discipline, and has given us the idea that mental discipline has its chief if not its sole value in the field in which it is acquired. It is for this reason that a good many people have come to believe that a young man is better prepared for business by the study of economics and commerce than by a study of Greek. Discipline and training are applied to actual life with a percentage of loss which varies inversely, and a percentage of efficiency which varies directly, with the similarity between the field in which they are acquired and the field in which they are used. Is it not a reasonable proposition to maintain that the exigencies of everyday life are quite as closely akin to the exigencies of football and baseball as they are to the problems of higher education? If so, we have a sound theoretical basis for maintaining that a boy will carry into the activities of business and social life the qualities of accuracy, patience, and determination which he learned at football, with less loss than the similar lessons which he may have learned in connection with calculus.

A few suggestions as to how this larger emphasis upon the body in the interest of a completely developed personality may be applied to the curriculum. In the public schools there should be not only systematic physical exercises, which should be given in close connection with the instruction in physiology and hygiene, but there should also be the largest possible amount of muscular activity in connection with all studies.

An alternation between mental and muscular activity in the schoolroom will not give as satisfactory results as the combination of the two processes which are both ideational and motor. In securing the proper balance, therefore, between mental and muscular training, the curriculum makers will have to consider not merely the question of getting a new subject into the crowded course of study, but the much more comprehensive question of a revised and improved method of teaching the old subjects.

In high schools and colleges a fair start toward this combination of mental and physical activities has already been made in the introduction of manual-

training courses and laboratory methods. But in addition to this, we shall ultimately have to work out a plan for departments of physical culture which shall be far more comprehensive in their scope than anything that has been hitherto attempted, and which shall be co-ordinate in dignity and credits with other departments. They should include four elements:

1. Systematic exercise for all students, suited to their individual needs, such as is now given in colleges having well-equipped gymnasiums and competent physical directors.

2. Theoretical work in physiology and hygiene. This should be as rigidly scientific in character as any other work done in the college and should be done as part of the work of the department of physical culture. It would include work in nutrition and sanitation. This part of the work and the practical part, the exercise, are related somewhat as lecture and laboratory are related in chemistry.

3. Thoro and careful supervision of athletics by the department. This will make it possible to escape the perils of the professional coach, whose only anxiety is to develop a winning team; will de-commercialize college athletics so that we can have the kind of games that are good for the boy without reference to the gate receipts, and will open the way to the development of a spirit of clean sportsmanship, which is getting to be a far rarer quality than it ought to be in American college athletics, as at present conducted. If the colleges are suffering from too great emphasis upon athletics in the student consciousness, the cure lies not in the abolition of football, but in the development of departments of physical culture which shall see that it ministers to education and not merely to excitement.

4. The work of such a department, including the points already mentioned, could be made a point of departure from which to approach a large body of material, both scientific and historical, which is at present but little used, and a point of contact thru which to touch and quicken the intellectual interests of a certain class of students whose college work has hitherto been perfunctory and unprofitable. At the present time a boy who happens to have a consuming zeal for micro-lepidoptera can take courses in the department of entomology and be looked upon as a shining light in the most strictly intellectual side of college life. But the boy who finds his most immediate interest in the achievement of his own bodily perfection (which seems to me quite as reasonable and useful an enthusiasm as the other) finds that this interest leads to nothing which the college sees fit to recognize.

The college ought, in some way, thru its department of physical education, to make the connection between this kind of boy's natural interest in physical things and the world of culture which seems to him shadowy and valueless. If it is the business of education to take a person where he is and lead him step by step to where he ought to be, then the department of physical culture has an open door before it. I am Greek enough to believe that if we treat physical science in a cultural way we shall get not only health but culture out of it. The

working-out of the details of such a program will call for much psychological insight, pedagogical sagacity, and breadth of education-sympathies. It will also call for a good deal of common sense. But it is worth the effort in view of the magnitude of the opportunity which the colleges and high schools now have to develop, not as an extra or an excrescence, but as an integral part of their curriculum, co-ordinate with their most scientific departments, a department of physical education which shall embody and express the recognition of the large place which modern educational theory ascribes to the body in the development of a well-rounded and effective personality.

DISCUSSION

A. O. THOMAS, president of State Normal School, Kearney, Nebr.—I am glad to be present and have a part on this splendid program. It seems much like a revival meeting and gospel-preaching, or perhaps better a court of justice and many convictions. It is good to see so much interest in this important subject.

The ancients used to divide the day into three divisions—eight hours for work, or the livelihood side; eight hours for the enjoyment of the fruits of industry and doing good, in other words, the fuller life; and eight hours for sleep. The division of time can scarcely be improved. However, our schools are emphasizing the fuller-life side and paying little attention to the working period or the livelihood. We have spent our forces, our money, and our energy on the side of intellectual education and have given little attention to the physical. The definition that education fits the individual for life is only half true. It should also fit the individual for livelihood.

The strenuous life we are living and the strong requirements to be placed upon the generation now being educated make it necessary to build up a strong body as a seat for the strong intellectual life required. The body is the machine thru which the soul expresses itself, or by means of which the soul performs its function. We should therefore spend a portion of our money and our energy on this phase of public education.

A body at ebb tide of vitality cannot sustain strong intellectual and moral growth. A body which does not receive careful culture cannot present its ultimate strength.

In order to present the proper balance of physical education three phases must receive emphasis—the industrial, the athletic, and the gymnastic.

The industrial form has great value as a means of definite expression and the consummation of an idea, which in itself, from the standpoint of utility, is the highest form of education. Games present the pleasurable and contest feature, both of which are legitimate incentives. The gymnasium develops those portions of the physical not usually employed in the above-mentioned forms, and represents the systematic culture of all parts.

But to our subject—the proper balance. If we consider but two phases of education, the physical and intellectual, we would say give half of the time of the curriculum to each. If we represent the three phases, one-third.

It is generally understood that the average student can handle four full studies in his school course. If so, it seems to me one-fourth of his time should be given to some of the three phases of physical training I have mentioned. In the earlier years, games and plays should predominate, but gradually giving way to the industrial in the higher courses, the gymnasium acting as a proper balance thruout the entire course, the industrial phase working out in some measure the vocational side. The great unrest in education manifest today is bound to work some sort of a revolution in our system of schools, and it must come along these lines.

ATHLETIC COMPETITION IN COLLEGE AND PREPARATORY SCHOOL, OR COMPETITION PREPARATORY TO ENTERING COLLEGE

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It is only about fifty years since the revival of scientific physical education and training. In fact it was not until after the Civil War that much attention was paid to the subject in modern times. As late as 1855 President Stearns, of Amherst, in his annual report to the trustees says, "The waning of the physical energies in the midway of college course is almost the rule, rather than the exception, and cases of complete breaking-down are painfully numerous."

In 1859 he returns to the same subject in his report of that year and says, speaking of the breaking-down of the health of the students: "Physical exercise is neglected, the laws of health are violated. The once active student soon becomes physically indolent, his mental powers become dulled, his movements and appearance indicate physical deterioration. By the time junior year is reached many students have broken down in health, and every year some lives are sacrificed." This is a fair representation of conditions in all the American colleges until 1860, when the first gymnasiums in this country were built at Harvard, Yale, and Amherst. Up to that time athletic sports were hardly in evidence in the United States, and yet it is admitted by all that physical instruction is at the basis of education and enters in a most important manner into the mental and moral training of all children and youth. That much has been accomplished in the last fifty years is very apparent, and it is just as clear that there is still very much to be done and also there are at the present time some very unfortunate tendencies, especially as the outcome of the intense competition in the athletic sports of the present day, which are taking the place which ought to be given to scientific physical education.

A solution of the problem growing out of this intense competitive spirit can be reached only by a careful examination of the true end of physical culture. The aim should always be to produce normal men and women and not abnormal. A normal person is one who conforms to an essential type or form, and that type or form accords with nature's authoritative standard. A normal heart will perform its proper function as nature intended it should. An enlarged heart is not a normal heart. A muscle greatly enlarged beyond its natural size, and which is not co-ordinated with the other functions of the body, nor with the natural and legitimate claims that life makes upon a man, is not a normal muscle.

The Greek idea which, as Charles Kingsley put it, was "to produce health—that is, harmony and symmetry and grace—in every faculty of mind and body," has not been surpassed. This Greek idea was to harmonize soul and body.

Dr. Sargent, of Harvard University, reminds us that according to Grote, Greece devoted more time to the physical training of her youth than to all other branches of education combined. This was one reason why the training for the Greek games was so carefully regulated, not only in regard to diet, bathing, hours of rest and practice, but also to one's intellectual and moral associations.

Perfect normality exists where each function of mind and body performs its work just as nature intended that it should. It should also be kept distinctly in mind that one finds a perfectly normal human being only where there is a perfect interaction of all physical organs with the mind. A distinguished writer upon physical culture says that "physical education has to do with the nerves as well as the muscles." It should be added, however, that normality can be obtained only as there is a proper interaction of mind and muscles and nerves, and some day it will be recognized that the teacher of physical training is just as much a trainer of the mind and of the moral nature as is the instructor of logic, psychology, or ethics. Dr. Paul Dubois in his *Psychic Treatment of Nervous Disorders* has made clear that the interrelation of mental and physical education is very close and of vast importance. "Every organic disease has its counterpart in nervousness," and this distinguished physician adds, "The characteristic thing in nervous cases is not their pains, but their mentality." He tells us further that what is called fatigue has a psychic element and that this has not been sufficiently recognized. True fatigue is doubled by the auto-suggestion of fatigue. "Soldiers on a forced march declare often they cannot take another step. Let the music of the regiment be played, and you will see these men resume their march almost at a quick-step." He adds, "They were fatigued, but under the influence of fatigue, their morale had awakened, and they saw their fatigue through the magnifying-glass of their unhealthy pessimism." To this Dr. William Gilbert Anderson, director of the Yale University School of Physical Education, adds, "The trained man brings to the aid of his intellect entire control of a strong and adaptable body; and therein lies the value of judicious physical training. Many people commit the error," he tells us, "of thinking that the production of a muscular giant, at the expense of the intellect, is the chief object of systems of exercise. As a matter of fact, modern physical education aims to assist the whole man toward symmetrical development, mental and moral as well as bodily," and to that Dr. Edward Mussey Hartwell, than whom there can be no better authority, adds, "Professional athletes through their special training are a class apart by themselves and are proverbial for their stupidity and brutality." While it is true that the body is an essential and co-operative ally in developing mental activity, it is even a more important truth that the mind is an essential and co-operative ally in developing a healthy body. Such men as Wundt, Helmholtz, Muller, and Harvey have made it clear that "not a feeling can arise, not a thought pass, without a set of concurring bodily processes." Juvenal's time-worn saying, *Mens sana in corpore sano*, has taken

on a very far-reaching meaning under the scientific investigations and spirit of modern study of the interrelation of psychology and physiology.

The ultimate end of physical training is to develop the power of self-control, a control which is positive and not negative. It enables the individual to wield and utilize all his mental forces and his physical powers for a high and definite end.

If we recognize this to be true, it is not difficult to discover some of the defects in the system of physical training which is the outcome of athletic competition in colleges and preparatory schools. Without doubt football, as now played, has trained men in self-control and given them power which has counted in the bringing of things to pass in after life; but the underlying fault in the game, as at present conducted, is that it is not so much true sport as it is a fight conducted on the basis of warfare. The men are trained to win a victory over someone else; they are coached, trained, scolded, ordered about, not to say abused, often by men intellectually and sometimes morally inferior to themselves, for the one definite purpose of fighting another set of men in a physical conquest which always has, as a dominating element in the minds of the players, the defeat of the enemy in a battle. When a certain number of these fights have taken place, then, the real end of all the physical training having been fulfilled, the contestants "go out of training" just as does the prize fighter. Meantime there has not been physical training for the many, but only for the few who are preparing for the contest. The instructions of the trainer and the conversation of the players and those who take sides, often with wagers of money which intensify their feelings, are much the same as one might hear on the eve of a great pugilistic fight, where the purpose is for one man to knock down another with his fist. There is much skill, no doubt, in these contests, and powers of endurance are tested to its limit. Sometimes the opposing teams, after a while, will have friendly conferences, just as old soldiers do who have fought each other on the battlefield; but all that does not change the mental and moral attitude which takes possession of whole institutions, including faculties, the student body, and all who encourage them in the contests.

Without doubt such training does develop will-power on the part of the players and so carries out the German idea of athletics, but that it is the true method of producing men who are mentally or physically normal, no one with the true conceptions of the end of human life can possibly claim.

Aside from the moral and intellectual influences which are the outcome of these undesirable competitive sports, there is, in both colleges and secondary schools, the very serious fact that a large amount of the work done in our gymnasiums is adjusted to the training of the men who are to enter these contests, and too often the great mass of students who most need normal physical training secure very little. It is only the strongest and best-developed men who are wanted for these teams, and they are the ones who least of all need the gymnasiums.

It too often happens that the great mass of young people who require painstaking "corrective work" under well-equipped instructors and medical advisers are neglected. When one considers the surprisingly large number of young people who have curvature of the spine to a greater or less degree, how many shoulders need "corrective work," how many of the vital organs should have special physical exercises for the normal activity, and when also one recognizes the admirable work that is done today along these lines for the betterment of human life, it is easily recognized that there are grave faults in the physical training of many of our schools and colleges.

If it is true that health means holiness, as Dr. Stanley Hall claims, it is also true that this "holiness" is dependent upon the "wholeness" which comes when a human body is made to act and react in all its delicately interrelated organs and functions.

While it is true that fresh air, sunlight, cleanliness, good food, and good water are necessary conditions of physical vigor, yet these of themselves will not correct a curvature of the spine which requires special physical apparatus and the direction of a thoroughgoing, well-trained instructor. The question which should ever be kept in view is, what will best prepare the pupils and students, men and women, for the work and the responsibilities of life? Is the intense competitive spirit engendered by such games as football, as carried on between the schools in America, producing the broadest, the noblest, and the sanest results? That is the question which must be answered in the attempt to meet the important and fundamental problem which we have been asked to discuss.

In this connection there is another question which it is well for us Americans to consider as we discuss physical training. That is, have we as yet learned how to enjoy sufficiently true sport for its own sake? Our English friends, in opposition to the German idea that muscles must be developed thru the will, maintain, with much good sense, that the best physique is secured unconsciously by means of athletic sports, especially in the open air. That is why the man at Oxford or Cambridge who is not devoted to some one sport at least, like tennis, cricket, or rowing, is not regarded as quite normal or in "good form." Certainly much of that wholesome, manly, Anglo-Saxon vigor of old England, which has led to great achievements thruout the world, is the outcome of the good health that one finds in a certain class of Englishmen who all their lives have enjoyed good sport. They of all other people have learned, especially at their secondary schools and universities, to enjoy sport for its own sake; and while they have not done as much as the Americans in the establishment and conduct of gymnasiums, yet they have gained much by the healthful games which they play in the open air. Out-of-door sports are coming into vogue more and more in America, but our cousins over the water still excel us in this respect.

The corrective and constructive work of modern scientifically conducted gymnasiums is essential, but Nature will do her work for both mind and body

when the strong play instinct is given opportunity to work out its beneficent results, when, with joyous exercise in the open air, one forgets himself in his sport and lets Nature have her own way of working out her own results with brain, nerves, and muscles.

DISCUSSION

WILLIAM S. SUTTON, dean of the Department of Education, University of Texas, Austin, Tex.—No careful observer of educational institutions in America would refuse to indorse President Slocum's contention that the authorities of secondary schools and colleges are greatly tempted to forget the true end of physical education, which is the development of normal men and women, and to overemphasize the athletic training of a small number of students whose ambition it is to shine in the college and the university athletic world. Highly organized athletic training for only a few boys or girls out of each school, to the neglect of the physical education of their fellows, cannot be justified by reputable standards of education or morals. This practice, which has grown up in America within the last quarter of a century, has too frequently been born of improper motives. Sometimes the motive has been the desire to win prestige for institutions whose representatives achieve many victories on athletic fields; at other times the dominant desire has been to furnish great public spectacles, by which the heart of the educational advertiser will be delighted; and not infrequently—God save the mark!—the controlling purpose has been to put money into the pockets of men who look upon education as a commercial pursuit.

President Slocum's second contention cannot be too strongly emphasized by school superintendents and high-school principals, as well as by college presidents and college professors. Some of the most desirable results to be obtained from physical exercise are, as it were, by-products. Inasmuch as the purpose of life is not physical, one is following a sound philosophy when he subordinates any form of physical exercise to a spiritual end. One who walks two miles in order to visit a friend, in whose conversation there is entertainment and profit, will find that the necessary physical labor involved in making the journey will be of even greater advantage than if he had, under compulsion, covered an equal distance with no other aim than that of physical exercise. Any highly institutionalized form of athletics, if allowed to become dominant in the minds of school people, leads inevitably to professionalism, which is always extremely conscious of its feats, and, furthermore, of the applause and ducats derived therefrom. Surely it is not the purpose of the public schools to develop professional athletes. The attitude of a gentleman toward the physical exercise which he should take, and which he must take if he preserve his mental, not to say his moral, vigor, is surely vastly different from that of a prize-fighter engaged in that training which is preparatory to a pugilistic contest.

President Slocum's third contention is thoroly sound. We teachers are not developing minds only or bodies only, but we are engaged in the care and culture of men. It is the ideal man which should be the all-controlling aim in all the phases of educational endeavor, intellectual or moral or physical, and these phases cannot, in reason or in safety, be divorced from one another. Athletic contests, if so regulated as to discharge reasonable and proper functions, should be encouraged in our schools, largely because of the fact that they will contribute to a sane and vigorous moral life—the underlying element in commendable citizenship. One who learns how to contend in generous emulation with another is learning a lesson sadly needed in the world of politics and business. The safety and the perpetuity of our country depend upon how well generation after generation shall be taught the virtues of modesty in the enjoyment of triumph, as well as the lesson of courage and hope in times of defeat.

One of the chief dangers to be guarded against in intercollegiate and interscholastic

athletic contests is that they furnish opportunities to develop an inordinate love of conquest, a passion easily aroused in the adolescent youth, especially if he be an Anglo-Saxon, and more especially if he belong to the American wing of the Anglo-Saxon race.

IRA B. FEE, deputy superintendent of public instruction, Cheyenne, Wyo.—In the topic assigned to Mr. Slocum, we who discuss it are confined to the competitive phase of athletics. It is hard, however, for one to present intelligently remedies for possible evils in competitive athletics without going beyond these limitations.

It has been my lot during my teaching experience to have been connected with the secondary schools and to have been more or less actively identified with the athletic sports commonly practiced. The three branches of competitive athletics which I have observed particularly attract boys of the high school are football, basket-ball, and track. In some places track athletics is displaced by baseball, or is jointly given attention; but as a rule where either of these sports is practiced in the average high school, the other receives little attention. I shall briefly consider the three first mentioned.

Football, in secondary schools, is played by boys from fifteen to nineteen years of age—boys who have not yet attained full growth and physical development. The game in itself is exciting and abounds in opportunity for good team work. In many ways great mental acumen may be developed by the football training. The quick, snappy plays, the centering of the attention on the call of signals, the necessity for each player to keep his temper and to exercise self-control help marvelously in training boys of school age for the contests of manhood that inevitably await them. But I believe that the benefit derived is more than counterbalanced by the risk of physical injury, and this is almost the unanimous verdict of physicians with whom I have talked concerning this branch of athletics in secondary schools. One physician stated to me that injuries received from deep bruises, often from fractures of collar-bones and tearing of ligaments, have been during youth without noticeable effect, but later in life these have again become very troublesome. Second, I would re-emphasize a point made by President Slocum. Football, as played today, whether in secondary school or college, has become almost wholly spectacular. The contestants do not enter the game for the sport, for the recreation, nor for the physical development. The contest is one between schools, and the team is chosen to win. Track athletics, in some of the events, such as jumping, vaulting, hurdling, and throwing weights, is splendid. Contests of this kind are instructive. There can be nothing more natural than that boys should compete in jumping or throwing. Under proper direction these events may be productive of physical, mental, and moral development. The long-distance runs, however, I unqualifiedly condemn for boys of the high-school age. These gruelling contests are a painful tax on heart and lungs. Several cases have come under my own observation where boys, competing in the distance runs, have as a result become incurably afflicted with valvular heart trouble.

Basket-ball, for competitive sports, I regard as the ideal game. It has all the advantages of team work and quickness of decision that accompany the game of football without the inevitable risk of injury. The contest, while keen, is not painfully exhausting. The zest of the game is often sufficient inducement to students without the necessity of inter-scholastic competition.

There are three chief objections, however, to the whole system of competitive athletics, and these I regard as serious. First, the custom of selecting for our teams the well-developed, powerfully built boys with no provision for the physical training of those less fortunate.

Second, the interruption to the classroom work, which unavoidably results from inter-scholastic competition. In the west, where distances are so great and train connections so uncertain, such interruption must occur if competing teams are allowed to meet.

Third, the spectacular is unduly prominent in competitive athletics. The time and attention of the whole school is centered on securing a winning team at any cost, even to the

extent frequently of introducing and encouraging questionable and unethical methods. School boards recognize this when they employ teacher-coaches whose duty is plainly to produce winning teams if they wish to retain their positions. Nothing is said about the methods. No attention is paid by them to members of the school not on the teams and none is expected.

I would advocate the encouragement on the part of our great National Education Association of compulsory physical training for boys and girls, and let the aim of this training be to develop mind and body alike and produce normal men and women. This training should be consistently given not only in the high school but in all the grades of the school system, the kind of training varying to meet the needs of the different grades. The teachers in all the departments of the schools should be required to be able to supervise this physical training successfully before certificates are granted. I would advocate that the better forms of competitive athletics such as basket-ball, baseball, and track, with the exclusion of the distance runs, be retained. With the stamp of approval given by the National Education Association to this plan I believe that the true aim of physical training, the production of normal men and women, will not long be delayed.

THE PROPER RELATION OF ORGANIZED SPORTS ON PUBLIC PLAYGROUNDS AND IN PUBLIC SCHOOLS

I. CHARLES E. CHADSEY, SUPERINTENDENT OF CITY SCHOOLS, DENVER, COLO.

The increased emphasis which is now being paid to everything pertaining to physical training and well-being is of the greatest importance to America. Out of this intelligent interest will unquestionably develop a stronger, sturdier physique. With increased physical power will come increased mental power and greater efficiency. Among the various organizations for physical betterment, none promises speedier efficiency than the public-playground movement. Like all great movements its usefulness is so obvious that one wonders why its development did not occur much earlier. The need of the growing child for exercise has been recognized clearly. The fact that the most efficient exercise for the growing child was to be secured from his play is of more recent recognition. Of course the immense development of urban life has brought about a condition which can be met only by systematic action on the part of the public. So long as there remained many vacant lots or fields the need for the organized, supervised public playground did not seem urgent.

Unfortunately the knowledge of the necessity of public playgrounds did not come to the public early enough to enable a sufficient number of public playgrounds to be provided in our larger cities. The encouraging fact in connection with the present movement for public playgrounds is that it will result in our smaller cities anticipating the need and in providing these grounds while land is cheap.

Almost every city in the United States presents the spectacle of large school buildings with very limited or no excess land. In thousands of cases no provision has been made for playgrounds of any kind. I, myself, remember within a few years hearing one of our most distinguished superintendents say that the purchase of school grounds to be used as playgrounds was an absolutely unjustifiable expenditure of school money.

School boards in most communities at the present time are realizing most clearly the value of larger grounds, yet in few cases are the grounds which are purchased sufficiently large to meet the needs of the community for organized play.

It is a debatable question as to whether public playgrounds should be administered from funds raised for educational purposes, or be provided from funds raised for the parks of the city. There are strong arguments in favor of the control either by the Park Commission or the Board of Education. No matter, however, as to which power may have control of the playgrounds, there is no question but that there must develop a very close relation between the public school and the public playground. All of our children are, during the greater part of the year, in attendance at some public school and under a very real control by the school authorities. The school system, as organized for the purpose of control, is unquestionably remarkably effective. Organized sports, therefore, can be successfully administered thru school authority better than thru any other authority. The grammar-school boy needs the kind of discipline afforded by organized games. He needs also to have developed during these years a high ethical sense as to sportsman-like conduct and fair play. He must learn not to question absolute conformity to the established rules of the game. All of these things can be secured effectively thru the school organization.

An interesting experiment looking toward an extremely close co-operation between the Public Playground Association of Denver and the public schools of Denver has just been concluded. Thru the co-operation of the Playground Association and the principals of the elementary schools, an elementary baseball league was formed. Thirty-two of the elementary schools of Denver joined this league. It was divided into four divisions—north, east, south, and west—each having eight teams. A definitely established schedule was arranged, the Playground Association furnishing umpires for these games, suitable trophies to be held by the winning team of the league, and individual trophies for the members of the winning teams. In general the Athletic Committee retained supervisory control. The details of the management of the league remained in the hands of the governing board of principals appointed by the city superintendent. This governing board established rules governing the teams. The principals of the buildings were placed in absolute charge of the personnel of the team. Any principal could make rules he thought desirable concerning habits and morals of the members of the team. In this way many of the schools were able to improve the general conduct of the members of the team and in no way was it reported that the excitement incident to the games militated against the school efficiency. Any appeal or protest which any team might wish to make thru its principal was referred to the governing board and considered on its merits. The winners of the four divisions played each other to determine the city championship. From the very beginning the most intense interest was manifested by the pupils and teachers of the schools

and the parents of the school children. Not infrequently from two to three thousand spectators were in attendance at these games. In only one or two instances were any fees charged and that was merely to defray the necessary expenses for the rental of the grounds.

School spirit and loyalty soon ran so high that in almost every case the parents of the school children contributed sufficient money to enable suitable uniforms and the necessary paraphernalia to be purchased. Interest in the games steadily increased until the playing of the championship game in the western league baseball park before an audience of five thousand people. The experiment seemed to indicate the most beneficial results in the way of the development of the sportsman-like attitude toward sports. The most difficult thing to overcome in the games of this kind is the charge by the losing team of unfairness on the part of the umpires and other officials. Not infrequently the principals and teachers themselves were carried away by these charges. The attitude of the governing board was uniformly just and I feel satisfied that the idea of taking one's medicine, bitter tho it may be, was greatly strengthened thru this insistence upon absolute conformity to the authority of the officials and the established rules of the game.

The unsupervised baseball game, in which all right-thinking boys will indulge, presents many evils in a large city. These games are ordinarily played upon vacant lots. They attract loafers who have a very low moral standard as to conduct. Profanity, vulgarity, and often violence are to be found at such places. The supervised scheduled game eliminates all of these evils. The authority of the principal over the team is unquestioned; the general authority of the Playground Association over the miscellaneous crowd is also unquestioned. If necessary, police protection is easily secured, altho in practically no instance was it found to be necessary. Ordinarily the principals preferred not to have the police, finding their own authority sufficient.

It is the intention of the Playground Association and the principals to extend this systematic and close relation between organized sports and the public school next year. Probably football and field sports will be added to the established schedule. The probability of having some organized sports for girls is also being considered.

It is safe to say that, while the general responsibility of the principals was increased, the good results of this organized work are so manifest that there will be an extension rather than a reduction of all such organized sports.

I believe that the good the young people receive is incalculable; that the lessened temptation for evil conduct and the lessened possibility of the development of bad habits is so great as to justify the extra responsibility.

Our young people need this organized play. They need to develop the right attitude toward sport. They are entitled to have these sports under the most favorable conditions, and there seems no other method possible which will secure these advantages so efficiently as thru the organized supervision of the schoolboy games.

That organized sports must, in order to be valuable, be under some definite supervision, does not admit of denial. The question as to where the responsibility for the control of these sports should lie may perhaps be debatable. Some principals feel strongly that while school athletic organizations are to be encouraged, contests with organizations in other schools bring so much trouble and responsibility that it is better to discourage them. They hold that the duties of a school principal are almost purely educational, and that such responsibilities as come in connection with athletic organizations result in a dissipation of forces which will lessen the power of the principal as an effective schoolman. Such principals hold that while organized sports are beneficial and highly desirable they should be controlled by outside organizations.

There is no question that as between outside control and no control the former is distinctly preferable. In fact, our public-playground associations in many of our larger cities are good organizations and bring about many valuable results which were illustrated by the work of our local elementary-school baseball league.

There seems little doubt, however, that unless public playgrounds under the control of some school association are established in every section of the city, these outside athletic organizations will be limited in their usefulness largely to immediate neighborhoods of the public playground. No such widely disseminated organization as was successfully established in Denver this spring could possibly be developed thru the Playground Association alone. It is also true that there will be more successful management of details when those who have control are also recognized by the children themselves as having general authority over their welfare.

In connection with the arduous duties of the elementary-school principal, I realize that the acceptance of such responsibilities as are implied in general city organizations entail greatly increased work. This is a detail which will have to be worked out by the principals and the city superintendent. In spite of this increased responsibility, however, I feel convinced that the most successful development of the organized sports must come thru the direct oversight of the school principal, but that the power and usefulness of such organizations are greatly increased where the public support, which is implied by the public-playground association, can be had.

II. MRS. LORNA HIGBEE LELAND, PLAYGROUND ARCHITECT AND ORGANIZER
TEMPLETON, MASS.; ONE OF THE AUTHORS OF "PLAY-
GROUND TECHNIQUE AND PLAYCRAFT"

The playground stands for natural education, racial education, self-education. It furnishes practically the only place in the city where the child is not obliged to do things foreign or distasteful to its nature. Play is nature's short-cut to experience. It teaches the lessons which were beneficial to the race in past ages.

The play-director is the interpreter of race tradition, and has become

necessary by the civilization which prevents the child from observing adult activity under favorable conditions and opportunity for imitation. The play-instructor secures his influence because he knows more things which will interest the children than their natural street leaders. The child is always the supreme judge of the efficiency of his leadership.

Playground activities must be recreative and interesting. A system of educational play for the playground must be prescribed with freedom for the child to choose the games he will play. His choice can be guided to ethical, educational, and hygienic ends, but these ends must be achieved on the playground thru the recreative application of play.

The school stands for the acquired education of civilization. Its system, developed by adults, represents the ideals toward which the race is consciously working. To the child, the school represents external authority and order, as do the teachings of parents, the church, and society; it is the personification of the "eternal musts;" the place to learn to work at disagreeable duties. School life should promote a high sense of duty as opposed to inclination; therefore, the teacher is necessarily a disciplinarian and often a taskmaster.

The school should meet the needs of the average pupil. The brightest at school must be kept back in order not to oustrip the dullards. Necessarily the passing mark is such that every student with proper study can reach it. Such methods raise average intelligence, the chief concomitant of civilization, but tend to limit individual initiative.

The discipline of schools and playgrounds is antithetical. The disobedient child is kept after school as punishment; the playground excludes him from the games and grounds and makes the play so interesting that the child is punished.

School sports should develop all the children. Schools and playgrounds are both necessary to complete education. Each should follow its own traditions. Therefore, a system of sports for public school should be:

First: Educational, teaching what adults decide best for the children.

Second: They should meet the hygienic, social, and educational conditions obtaining with the majority, who may be underfed, with insufficient sleep, and living under unsanitary conditions. The stimulus of intense competition may lead the ambitious, nervous child greatly to exceed the safe limitations of his strength.

Third: They should be compulsory and a regular part of school work, with standards within reach of the average child.

Fourth: They must be adapted to school equipment without extensive costly immediate changes.

Lastly: They must not lose their identity as sports.

Competition in school sports should be sufficient only to hold the interest of the children. School sports should prepare for freer competition on the playground. Informal, interschool contests, or the formation of teams by choosing sides in the physical-training classes should be sufficient to hold interest. Active participation by every pupil and equal development of all players should be the ideal of school sports.

The playgrounds should develop leaders. The traditions of the playground are such that it furnishes unequalled opportunity, in an atmosphere of liberty, for the development of leaders. The child is here not shielded from the consequences of his own misdoings. Many of the forces of education are maternal. Too much of this good thing creates dependence. It is sometimes claimed that things are made too easy for the children, that knowledge is fed to them in homeopathic, sugar-coated doses. But the playground represents life standards of child civilization. In order to "make" the team it is necessary to "deliver the goods." If little Johnny "muffs a pop-up," his peers sit in judgment and the jury pay no attention to the plea, "He did his best." The verdict is, "Give him the sack off the team." There is no 65 per cent. passing mark on the play field.

Interscholar competition can be carried on best thru the co-operation of the public playgrounds. Playground school sports, under the joint control of the public schools, private and parochial schools, and playgrounds, should furnish opportunity thru competition for the development of leaders. Only those passing certain physical and mental standards should compete. Teams, including all those who "passed" in athletics, should be formed to compete with respective teams from other schools on the playground. There would be first, second, third, etc., teams for each sport in each school. The total score would be the combined score of all the teams. District games would be played off in the nearest playground. The championship meet could be made a great Fourth of July Festival. Prizes should be inexpensive—ribbons and banners to go to the team, school, and playground rather than to individuals.

Physical training and manual training should be correlated thru constructive play. The child's instinct for play should not be satisfied with ready-made toys. Children should work for their play to derive educational benefit. The official bats and balls and other equipment used for school and playground games should be child-made; the champions, those who make the best goods and play the best game. Playground and school sports can direct the dynamic stream of play into the channels of playcraft, where its force can become accustomed to industrial uses.

If money is spent on materials and instructors to teach the children to make their own play supplies, some temptations would be removed from politicians and others who are not in business for their health.

Competition, unless carefully regulated, leads to specialization introducing commercialism and corruption in athletics. Children's sports should be developed for the sake of the children, not for the sake of the game and the spectator. American sports, especially in college, high school, and athletic clubs, are professional in methods and ideals, because they are intended mainly to interest the spectator and not for the benefit of the player. The playing-rules for professionals and amateurs should be on an entirely different basis. The educators of our country can absolutely change the tendency of our national games by controlling the committees on rules. These committees

have been generally made up of professional coaches and others, who, judging from results, have been interested largely in the money side of the game. Naturally the tendency of the game has been toward specialization.

Normal, clean-sport campaigns may be necessary and right among professionals; but for amateurs, reform should strike at the roots of evil by modifying the conditions which cause corruption, rather than by treating symptoms with the antidotes of registration of teams, who must use "official balls," etc., the proceeds from the sale of which pays the expense of whitewashing and advertising of official sporting goods.

Children who have never been subjected to corrupting influences naturally love fair play, and play the game for the game's sake.

Educators should prepare and publish modified rules to develop children's sports with amateur ideals. The control of committees on rules, modifications, and publication of rules governing the sports of schools and playgrounds should be in the hands of educators, physical educators, hygienists, and others, who are not dependent upon commercial interests in securing and holding their positions. Such a rules' committee should modify our traditional games to adapt them to city, school, and playground conditions, and should publish these modified rules and keep control of the situation rather than permit the publication and control to be taken up by the same interests which have done so much to specialize American games.

When the children's games of our country follow in the commercial and professional footsteps of the games for adults, as now played, then amateur sport in America will indeed be dead.

HOW SHOULD THE ATHLETICS OF BOTH MEN'S AND BOYS' DEPARTMENTS OF THE Y. M. C. A. SUPPLEMENT THAT OF THE PUBLIC SCHOOLS?

I. JOHN DIETRICH, SUPERINTENDENT OF PUBLIC SCHOOLS
COLORADO SPRINGS, COLO.

The Y. M. C. A. thru its athletic departments has done much toward creating a public interest in athletics, not simply for those who are willing to play match games, but in athletics for the masses—for all. This interest, reinforced by the interest on the part of a few officially connected with the schools, has made it possible to organize and maintain successfully a system of athletics in the public schools of many of our smaller cities.

In some places the physical director of the Association supervises all the physical training in the public schools. He frequently gives instruction to the teachers in reference to the drills that can be given in the classroom, and also supervises the athletics and sports of the boys. In other cities a public-school athletic league is formed, and the physical director is the executive officer of this organization. Again, frequently an arrangement is made with schools under which the students use the regular Association gymnasium at

special times, a special arrangement being made for their use at stated hours. This is done where the schools have no gymnasium of their own. In some cases, the Association receives a small money compensation for the use of the gymnasium and the services of the director, and in addition to this, receives, and logically so, a larger membership from the schools, due, in a measure at least, to the close and reciprocal relation between the two organizations.

It is possible also for the examining staff of the local Association to assist in making physical and medical examinations of the school children. This is highly important, since such examinations made recently have revealed the fact that there are many physical defects among school children which are intimately related to mental retardation.

In another city, the high-school basket-ball teams use the gymnasium of the Y. M. C. A. three consecutive afternoons each week for a high-school basket-ball tournament. A regular gymnasium class for high-school boys under seventeen years of age meets two afternoons a week. Only those who are members of the Y. M. C. A. may become members of this class. In another city, all kinds of indoor and outdoor athletics are promoted thru the physical department of the Y. M. C. A., and, with the exception of football, the Association is the controlling element in the public schools. Basket-ball leagues are organized among the grade schools and most of the high-school classes, and also baseball leagues of a similar nature and an interscholastic field-meet is held once a year under the auspices of the Association. In this same city an attempt is being made by the Y. W. C. A. to interest the Board of Education in having the regular gymnasium exercises furnished at a fixed sum to the girls of the high school. It has not been definitely determined that this can be brought about.

One Association secretary writes as follows:

The Y. M. C. A. can supplement in many ways the physical training of a high school, particularly along educational phases. In our city we are organizing a branch of a social hygiene society, and we will have at our command ten to twenty local physicians who will be pledged to teach the subject of personal, sexual, domestic, and community hygiene. We will endeavor to arrange opportunities for these lectures to be presented to the students in the high schools. Again, by supplying competent officials for interscholastic games—men who have the highest moral ideals, who stand for the teaching of right standards thru competitive games—we will be able, in a measure, to influence the standards of play among students of the different schools.

In Colorado Springs, the relation between the athletic department of the schools and that of the Y. M. C. A. is similar to the relation existing between the athletic department of other schools and the Association. The athletic work of our elementary schools is carried on in a large measure by the Y. M. C. A. under the auspices of the Anti-Cigarette League. The work is managed directly by the principals of the schools and officers of the Association. At first, two field-meets were held each year. A spelling contest held at the close of the first semester has been substituted for the fall or winter field-meet of the original plan. The one field-meet is held in May of each year. A

number of medals and cups are offered as prizes. The interest in both the spelling contests and field-meets is excellent, and the attendance is always large. A small admission fee is charged, and from the net proceeds, the cups and medals are purchased. If there is any money left, it goes into the treasury of the Boys' Department of the Association. All of the financial obligations are assumed by the Association. This plan has not only helped the athletics of our schools, but has also strengthened the work in spelling.

I believe that the Men's and Boys' Athletic Departments of the Y. M. C. A. may be of the greatest assistance to the athletic work of public schools not having gymnasiums, and who are not able to employ a director of physical culture. The expert direction the Association is in a position to give, and the altruistic spirit with which it must take up the work, place the Association in a position to do this needed work better than any other agency in this field. The equipment of the Association for athletic work gives it a grip on the young life of the city that nothing else can offer.

The work should be so organized by the schools and the Association that regular and systematic help can be given pupils and teachers.

Because the Association stands for the highest ideals of moral training, there should be a very close relation between the schools and the Association in physical training. This will afford an excellent opportunity for impressing the plastic youth, not only with right standards of conduct during the playing of games, but also as regards the relation of every boy to his fellows in other activities of life.

Permit me to emphasize the importance of keeping the work of the Y. M. C. A. and that of the schools distinct, to the end that any appreciable amount of friction and embarrassment may be entirely avoided. Let it be further understood that the relation between the athletic department of the public schools and those of the Association should be close, but not official.

II. E. C. BISHOP, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION LINCOLN, NEBR.

The wording of the subject indicates that there is a co-operative relation between the Y. M. C. A., and the public schools, especially in matters relating to athletics. This relationship comes from the duty of the public school to provide physical training for schoolboys, and from the desire of the Y. M. C. A. to be helpful in properly directing the interests of all boys.

The spiritual life of the boy is the phase of most concern to the Y. M. C. A., and it should be the basis of effort from the standpoint of the school, as well. In the working-out of this idea there seems to be a more or less settled opinion to the effect that the school reaches the spiritual life of the boy largely thru the more intellectual processes, and that the Y. M. C. A. reaches the boy thru the processes of physical influences.

Since, then, the boy is the object of operation from both Y. M. C. A. and public-school sources, and since the school has, in common with the Y. M.

C. A., an interest in boy development thru the agencies of physical education, the natural question is: "In what way can the physical education of the boy be best provided for by the two factors interested in and responsible for right results?"

The form of stating the question indicates that the school is the responsible agent for the athletic training of the boy, and that the Y. M. C. A. is in position to supplement the work of the school. I shall so treat the subject.

I am prepared to discuss the subject almost entirely from only one condition. That condition is where the public school is not prepared to provide proper athletic training. This condition exists in some of the large and in many of the smaller high schools and grammar schools.

Inadequate gymnasium facilities and the lack of physical directors are the needs which most often open the way for profitable supplementary work by the Y. M. C. A. Gymnasium and bath privileges have long been a center for co-operation between the Y. M. C. A. and the public school. The organization of sports and the discipline on public-school playgrounds is a more recent opening for effective service.

The Y. M. C. A. is to a great degree an organization which acts on the initiative. I am convinced that the interest aroused and the effects gained by the efforts of the Y. M. C. A. to organize boys in clean play and sensible, attractive, physical training constitute one of the most powerful present influences in securing action by boards of education, which results in making such provision for athletic training under the control of the school that the supplementary work of the Y. M. C. A. is no longer a pressing necessity, and is gradually molded into co-operation, rather than supplementation.

It has been my privilege for several years to serve as chairman of the junior committee on the board of directors of our city Y. M. C. A. May I be pardoned for referring to the work with which I am best acquainted?

Our Junior Department aims to reach boys of grammar- and high-school age, whether in school or out of school. But from the difference of influences governing the life of the boy, we find a place for the organization of special features in gymnasium work and in outdoor sports for divisions either known, or at least conducted, as Working-Boys' Division, Sunday-School Division, Grammar-Grade Division, and High-School Division, with such general associations as to bring about the proper kind and degree of fellowship between the members of all divisions, the work being the same in many respects except as to the time of assembly and practice.

From this we get our grammar- and high-school baseball and basket-ball teams, our working-boy teams, and our Sunday-school baseball league teams. (I explain here that our Sunday-school baseball teams practice and play any day except Sunday, despite the suggestion offered in the name of the organization.)

■ With our gymnasium classes of schoolboys, one matter that requires careful adjustment is the time of conducting classes so that they will not interfere

either directly or indirectly with school duties both in and out of school. Another matter that has required regulation is the conflict of dates between athletic events in which some schoolboys are represented on a Y. M. C. A. team and also on a school team, making it necessary for the boy to choose between playing a schedule game with the Y. M. C. A. team to which he belongs, and playing a school-schedule game with the high-school and grammar-school teams in which he also belongs.

The Y. M. C. A.'s of Omaha and Lincoln and the city schools have united the past year in the organization of Vacation School Garden Clubs. These clubs are under the direction of the Junior Departments of the Y. M. C. A. Last year Omaha had such clubs in 33 ward schools, with a total membership of about 1,000. The director of the garden work was hired by the Y. M. C. A. The city superintendent, thru his ward principals, assembled the boys who wished to take up the work. The garden director met each club at the school building by arrangement with the principal of the school at such times as seemed desirable, and visited the gardens personally and then the captains of the clubs. The organization is being continued this year under practically the same plan and the ward principals are saying good things of the result upon the boys who do the work, and upon the school generally as affected thereby.

At Lincoln, the plan is practically the same, except that the City Improvement Society unites with the Board of Education of the public school and the Y. M. C. A. in supporting the work.

A proper respect for the dignity of labor, and the creation of a greater degree of love for plant life and culture processes has thus been developed thru these co-operative agencies. We may call this phase of the work supplementary work of the Y. M. C. A. in school and home gardening—which is a form of outdoor athletics deserving of as much attention as track athletics and field-meets, because of its influence and relation to the home life of every boy, regardless of whether he is so fortunate as to be favored with physical powers which admit him to some other forms of athletics in which only the strong boy can get full enjoyment.

The public-school teacher no doubt has a better conception of boy life than any other public agency outside the Y. M. C. A. But public-school teachers, generally untrained in what constitutes true sportsmanship, are too often unresponsive to the demand on the part of the boy for direction on playground, in gymnasium, and on athletic field. The Y. M. C. A. with trained physical directors, who have high ideals of manhood, along with practical application to boy life, are in position to give very helpful co-operation.

The Y. M. C. A., better understanding the boy in his social relations teaches him by actual practice (not "moral suasion") to deal fairly with his fellows. With the Y. M. C. A. influences religion grows into the boy. Too often with the school influence it is poured into him. The activities of the

Y. M. C. A. should not be confined to the actual membership, but extended to the larger field co-operative with the church, the public schools, and the home.

The physical conception of the boy life is a strong feature of Y. M. C. A. management. The physical enters so largely in the life of the growing boy that if we would deal successfully with boys we must recognize this. A conception of fair play and a love for clean athletics are strong factors in the intellectual and spiritual development of the boy. It is in the great subject of play that the Y. M. C. A. can supplement the work of the teacher in the public school. One of the agencies is the interschool athletic contests, in which different schools in the same city select their sets of champions and compete on a common ground for (a) school honors to teams; (b) individual honors to members.

I refer here to the work of last year of the Omaha Y. M. C. A. with the city schools. The following letter from City Superintendent W. M. Davidson, to Mr. Dennison, the Omaha Y. M. C. A. Boys' Secretary, is self-explanatory:

March 23, 1908

Principals:

This authorizes Mr. Dennison to work among your seventh- and eighth-grade boys either along the line of "organized play" or along the line of "athletics."

Mr. Dennison understands that this work is to be taken up with the co-operation, and under the direction, of the principal.

Mr. Dennison organized 31 of the ward-school boys into a series of athletic try-outs, ending with a final athletic meet, where chosen teams from the various schools competed for honors.

I take the following extract from a letter of Mr. Dennison to each of the ward principals:

Now that the school meets are over, I am anxious to get at the results, and I should appreciate it very much if you will write me very frankly as to how the affair has impressed you, and the effect it has evidently had upon your children. Especially would I like to know if it has helped to increase a spirit of loyalty for your own school and of friendly co-operation with other schools.

Here are a few typical answers. Some of the letters offered suggestions for strengthening the work, but all summarize the general effect as good. The principal of the Beal's School wrote:

One of the most delightful events in the experience of the Beal's School was May 19, 1908. We certainly vote to have the "meet" in the Auditorium.

The greatest benefit to our school was "bumping up" against the world. The experience thus gained has been of practical value.

The letter from the Saratoga School said in part:

The spirit of loyalty to our own school has been intensified. It gave many of our older boys who do not have the opportunity of mingling freely with those of their age and size an opportunity of measuring themselves with others, and I believe it has increased their self-respect.

The spirit of friendly co-operation with other schools was fine to witness. A deep interest in athletics has been aroused among our boys. They practice during intermissions and after school.

We appreciate the interest you are taking in the schoolboys who are not members of the Y. M. C. A., and believe that you are rousing an interest in manly sports that will lead to better physical development and to higher ideals of conduct.

The principal of the Kellom said:

I confess that I entertained many doubts as to the ethical results, but, after watching the effect of the one just finished, I am thoroly convinced that it can be made a valuable adjunct to our work. Every teacher is closer to her boys because of her interest in their manly sports. Every principal is making practical applications of the laws of good team work, and for my own part, I shall "get on my mark, get set, and go" with a keener appreciation than I ever had before of the rare privilege that is mine.

The answer from the Long School contained the following:

It certainly has been a great help in fostering among our boys a spirit of appreciation of each other and of what is being done for them.

Boys, who formerly were always antagonists, have forgotten to be forever on the defensive, and instead, have taken an attitude of helpfulness and loyalty to the school.

However much we appreciate what it has done for our school, I am sure the advantage is not all on one side, for it will certainly be the means of increasing the boys' membership in the Y. M. C. A.

Mr. Dennison and his assistant visited the various schools at times agreeable with the principals, and directed the boys in their play. From a large number of letters, I have selected a few typical ones which not only furnish some excellent composition work for the boys, but indicate the results, measured from the attitude of the children. The first is written in a boy's brief blunt style:

I am writing this to thank you very much for the games you have taught us to play. I am sorry that you have to quit. I enjoyed the games very much. We hope to play more fairly and intelligently in the future. We hope you will come again.

Another boy's letter says:

We wish to thank you very much for the plan you made in regard to the sporting events in the different schools. We feel that you are our very best friend in the sporting line as well as other ways. We hope you have enjoyed us as much as we have enjoyed you and your associate, Mr. Cunningham. We hope to become thoro and gentlemanly sportsmen under your and Mr. Cunningham's care. We hope you will come again.

The girls were allowed to look on. Here is a sample of their letters:

We cannot thank you too much for what you have done for the boys of our school. We girls regret very much that we cannot enter the sports. Some of us girls have chosen which side we hope will win. Every day you and Mr. Cunningham come, it is very exciting and interesting for us as well as the boys. Thanking you again for your interest in our boys, I am.

I addressed letters to several individuals who are interested in, and in a measure more or less responsible for, high-school and Y. M. C. A. results in Lincoln, Nebr. This letter was received from Mr. Foster, Boys' Secretary of the Y. M. C. A.:

The boys' work of the Lincoln Young Men's Christian Association is to a very great extent a work with schoolboys. The high-school boys in the Boys' Department number 145 and in the Men's Department 65.

The physical work as a whole revolves around the organized gymnasium class work. To understand thoroly the relation existing between the Lincoln High School and the Association it must first be known that there is no provision for gymnastic work at the high school. In lieu of courses in physical culture the school authorities grant credit to the students who take gymnasium work in the Association gymnasium on the basis of two-fifths of a point each for the first two semesters, and one-fifth of a point for each semester thereafter. On this account the roll is called each day in the high-school classes, a practice which is not followed in any of the other classes. We have two classes for high-school boys, each meeting three periods, of one hour each, a week. There are also two such classes for the grade-school boys.

Last recently an interclass meet was held for high-school boys only.

Last year basket-ball teams were organized among the grade-school boys and a series of games played between the various school teams. No admission was charged and it was a common thing for 150 to 200 boys and girls to be on hand to cheer their respective teams on to victory. These teams were organized from the boys in their respective schools who were members of the Association.

Our physical director, Mr. Pinneo, has conducted a grade-school baseball league for the past two seasons, the city schools bearing the expense of providing the baseballs and Mr. Pinneo attending to the details of organizing the league and seeing to the playing of the games.

Last year we conducted a city baseball league among the boys. We had a league of six teams and played out a schedule of 144 games. Association officers provided umpires and had a hand in all the proceedings. The expenses of this league were all met by the boys themselves.

Reply from City Superintendent W. L. Stephens says in part:

The influence of the Y. M. C. A. among the boys of the grammar schools has been good. The baseball league, under the direct management of Mr. Pinneo, has been successful. Profanity, unfairness, and ungentelemanly conduct in general have been practically eliminated from the baseball diamond, while the league games are being played. I am positive that the early associations of the grammar-grade boys with the Y. M. C. A. thru the baseball league has been influential in bringing many of them into the membership of the organization at the age when formative influences are most powerful.

From Mr. C. W. Philpott, one of the high-school instructors in charge of athletics, I quote as follows:

Last year we were playing for the city championship and it happened that the center on the Y. M. C. A. Junior Basket-Ball Team was the same as chosen by Coach Whelan for the high-school team. The result was a choice between the center's loyalty to the Y. M. C. A. or to his school. He chose the Y. M. C. A., with the result of the loss of the city championship, which otherwise would have been won by the high school. So great did this disturbing factor become in the West Des Moines High School that now before a boy is allowed to begin practicing for any team he has to sign a pledge stating that "his first allegiance shall be to his school."

A reply from Miss Mariel C. Gere, one of the women high-school instructors, who takes an active part in all high-school social matters, says:

In favor of the Y. M. C. A. gymnasium, one often hears the statement that the character and influence of the men in charge is of great importance to boys at this impressionable age, and this is most emphatically true. However, there is no reason why men of the same character and influence should not be employed by the school.

There is this to be said about the Y. M. C. A. gymnasiums, that cannot be said of the high-school gymnasiums that I know about: the Y. M. C. A. gymnasium gives boys a

place to congregate and a safe place to spend their evenings. By giving them a taste of a sort of club life and innocent amusements, they are often kept off the streets.

I shall not sermonize further, but leave to the reader the privilege of forming any conclusions which may receive some direction or diversion by anything I may have attempted to present.

DISCUSSION

WILLIAM B. NEWHALL, M.D., physical director of Y. M. C. A., Denver, Colo.—The Physical Department of the Young Men's Christian Association is not an instrument primarily for the promotion of athletics and gymnastics, laudable as these pursuits may be, but *is* an instrument for social service to the community, along physical lines, using these and other rational means for the inculcation of correct habits of life. Its field, briefly stated, is that of every boy and man in the community who has a physical need, and to whom no other organization is ministering. The Association thus becomes one more instrument that the educator may use in his effort to prepare boys for the great game of life. He may limit its usefulness to that of a mere promoter of athletic competition, or he may broaden its scope until every physical need of the boy is met by its aid.

In Mr. Dietrich's paper the fact that no *official* relation between the school and the Association should exist was made apparent, and emphasis should be laid upon this, with the added statement that it is unwise for the physical director of the Association to be a paid supervisor or physical-training teacher, or even athletic coach, in the school system. The field and problem of each position is sufficiently ample to provide exercise for the faculties of separate men, and a divided duty will inevitably mean a divided interest and consequent lack of efficiency.

The Association's relation to the school system, so far as the subject under discussion is concerned, falls naturally into two classes: (a) where supervisors of physical training or physical directors are employed; (b) where no systematic physical training, under paid supervision, is carried on. The relation where supervisors are employed will of course be that of the fullest co-operation with them. The Association physical director should endeavor to learn what the school director is striving to attain, and at his invitation assist in conducting certain phases of the work that the Association man may be fitted to undertake, both because of his peculiar training and broad relation to the community. So far as the athletic situation is considered, the Association might be asked to provide expert instructors from the ranks of its trained leaders and athletes, who would volunteer to meet the boys at recess periods or after study hours for instruction and advice in competitive athletics, games, and other forms of play life. These men might also act as officials at the different school track-meets and games. Not the least of their efforts should be directed toward the teaching of the clean-sport idea. The emphasis should not be laid upon the seeking and developing of the crack athlete, but upon encouraging *every* boy to take up some form of play.

The school and Association directors might together create and mold public sentiment looking toward better play opportunities for the schoolboy and a more efficient equipment for the teaching of athletics, gymnastics, and games. They might also foster a sentiment for the medical inspection of school children from the athletic standpoint, and use the data thus obtained to make their work more efficient.

The Association gymnasium might become a place where cases of inco-ordination, scoliosis, and other abnormal conditions requiring individual treatment could be referred. The abnormally shy boy and the boy with the undeveloped play instinct might also be helped by special work in the Association.

For the city where no systematic physical training is given in the public schools, the first duty of the Association director and of his department, as an instrument to further

the physical welfare of the community, is to create a sentiment toward the establishment of such sane physical training as is enjoyed by cities of like size elsewhere. All the effort, whatever type it may take, should have this end in view. The campaign must be educational and the matter of physical training under competent supervision kept constantly before those interested in school welfare.

Certain practical demonstrations of the value of such physical training may be given so as to impress the fact upon the people, and perhaps it would be wise to follow the line of least resistance, which at present seems to be in its athletic branch, where the spectacular attracts the public attention. The schoolboys may be organized into athletic leagues, baseball and basket-ball leagues; and track-meets and game tournaments in these and similar sports conducted by the Association. Occasionally groups of boys may be invited to use the Association field or gymnasium for their games or contests.

One of the greatest services that the Association can render the boys is to follow them up when they leave school for business life. Lists of names of such boys may be secured from the school authorities, and inducements offered them to become members of the employed-boys' department of the Association, where they will be encouraged to take the systematic exercise their growing bodies require. Frequently the slight expense incurred thereby may be met by co-operation with the employer. This plan is in successful operation in several cities.

Another phase of work, and one which has the elements of real social service in it, may be conducted by the Association, even where no other form of physical training is attempted. I refer to the national movement to teach all the boys of a community to swim, using as teachers the Association boys and men who have already learned, and the Association pool, the public bath, or a convenient lake or stream as the place of teaching. The plan thus far worked out is to visit each schoolroom, give a short talk on the obvious advantages of a knowledge of swimming, and leave with the teacher cards to be filled out by the boys, stating name, age, school, inability and desire to swim—this card to be countersigned by the teacher, and to entitle the holder to instruction upon presentation at the selected place.

From one point of view the Association is a great organized instrument for the physical welfare of the boys, and it is incumbent on the educator to make use of it, in his effort to develop the young life. The Association gladly welcomes every opportunity to be of service to the men and boys of the community, and realizes to the fullest its responsibility to the schoolboy. The invitation should come from the school, however, and the relation be one of an absolutely unofficial nature.

From the standpoint of the Association physical director, the school is a great opportunity for social service of the finest and most lasting type. The impulse should come from a sincere desire to help the boy to attain the fullest expression of his physical life, and the question of increased memberships or remuneration never allowed to enter it for a moment. May we, as school and Association directors, but above all, as men interested in the physical welfare of the whole boy community, seek to use these opportunities so wide open before us in the fullest way, that the boys of our communities may be developed and conserved into efficient American citizens.

MRS. FRANCES WAITE LEITER, Superintendent Physical Education Department, National Woman's Christian Temperance Union, Mansfield, Ohio.—According to reliable medical and other authority, hygiene is defined as the "science and art of preserving health by appropriate care and nourishment of the body and proper regulation of surroundings."

If promoting health were the whole object of physical education, we might correctly claim that it should be a subdepartment under hygiene. This, however, is not the case.

If the health of children were continuously normal, and there existed no necessity for building and protecting against the strain and confinement of school life (which of course

is not the case), there would yet remain the great need of bodily development and training, which is the primary object of physical education in the schools, and thru which *health does result*.

The prevailing low vitality of the people leads many to think that all effort must bear in the direction of restoring the same to normal; and that promoting health *is* the end and aim of all service for the body of the child.

In bills which were introduced in a number of states during last winter to secure laws making bodily development and discipline compulsory in all schools under public control, physical education was defined as the "development and training of the body and the promotion of health, thru systematic physical exercise and practical knowledge of the laws of hygiene."

If 25 per cent. of school children were, today, mental defectives of such character as could be overcome by hygienic measures, thereby securing to the brain normal conditions, would this necessity be reason *per se* for placing mental education under hygiene in the curriculum?

It is my belief that in the dim future, when some fads and fancies have run their course, and when the serious problem of the present low vital condition of the people is well in hand, there will be established beyond question three distinct departments of education; namely—physical, mental, and moral; and the physical department will include all that pertains to the well-being, advancement, and culture of the body, such as anatomy, physiology, and hygiene; domestic science and art work; industrial training, so far as it obtains in the public schools; voice culture—reading, oratory, music; direct education of the eye and the ear; while, underlying all as the legitimate outgrowth of bodily development and training thru systematic exercise, and toward which every part of the body will contribute, will be the highest possible physical and functional conditions; or, in other words, *the priceless boon of health*.

Physical education, then, is not primarily to secure health, but to promote the greatest possible efficiency of the individual, in which health is an important factor. It will perhaps always be necessary to attach some kind of hospital facilities to the public schools for the benefit of the "undertones;" but the thing itself, *the school*, should not be considered a hospital.

With such premises as these, physical education in the public school cannot consistently be considered a subdepartment under hygiene; but a department which, in its aims and results, embodies hygiene.

FRANK G. BRUNER, Department of Child Study, Public Schools, Chicago, Ill., felt that teachers are attempting to reach the point where their instruction will not be so much for the masses, as for the individual. The child is an individual, and physical training, if it is to be of value, ought to be adapted to the individual needs.

Physical training itself is valueless unless in the proper sort of environment. This endeavor to put the prime emphasis on the environment of the child makes the hygienic feature of physical education of prime importance.

ELLEN C. SABIN, President of Downer College, Milwaukee, Wis., said that she thought there was not enough said about what the headmaster ought to do. He is the best paid, and he is eminently the one who ought to be made responsible for the buildings and grounds; also the sentiment concerning health. What the headmaster tells in the different schools has a great influence. He could arouse their sympathy with regard to the work of the Board of Health, and could place before them in their proper light all such questions as public health, hygiene, general development, etc.

MRS. CAROLINE LEFAVRE, of Denver.—Today in the midst of a complex life, we need be admonished to see man and youth as something more than merely muscular organisms. Other questions are to be considered besides those of feats of physical endurance and

dexterity of tricks. In these days and places of trains and baggage conveyances, it is not likely to become necessary for us to walk twenty miles at a stretch nor to carry a trunk or a piano to a railroad train, as we see a porter of Constantinople do; and that, too, on his black bread, onion, and unseasoned cucumbers. Why give direction of our powers to lines which have no real part in the well-being of the individual nor the social unit of the human race? In violent sports, an undue draft is made upon all sides of the human system for feats spectacular chiefly and for notoriety of a contemptible sort, with which to satisfy the baser vanities. Sometimes fatal injury is at once experienced. The spirit of emulation, the braggadocio of contest this engenders in the younger children is emphatically detrimental to their best interests. The devitalizing drain upon the brain and nerves, as well as the valvular heart action, is plainly observable to a keen-minded onlooker and student of the legitimate welfare of the oncoming generation. I have studied several American and European systems of physical culture and found much good in all and some in all to be rejected. There are two classes of physical culturists. One boasts of the professionals he has let loose on the arena of pugilism, trapeze, trickery, long-distance walking endurance, heavy-weight lifting, and the power to "beat" his fellow-opponents or competitors. His vision is defective, and he sees nothing in the schoolboy or girl outside the child's relation to his muscle-making trade and the tricks thereof. The other one views physical education differently, and relates it to the child in his possible future symmetrical selfhood. This teacher grows greater each day as he rises with the sun and songbird and says, "Let me this day contribute my legitimate part toward a more full-forced, symmetrical, poised, self-sustained, self-expressive individuality for my pupil."

Much has been said about working off the superfluous animal energy of the child by violent physical culture. I say why have superfluous energy to be thus worked off? Mothers as well as teachers should be aroused to the need of giving the child the proper sort of material food with elements for brain and nerve (it can be done), and to stimulate the higher brain and nerve centers by early morning "upper-brain" drill. Do not eat nor feed the child till you have agitated and used the higher part of the brain which has to do with the nobler aspirations and activities. The beneficial results of this before-breakfast mental discipline drill will soon be seen. The ill effects of violent physical exercise or over-muscular development are often so subtle as not to be noted by the careless or thoughtless, but they do undermine the bank of selfhood by drawing upon its resources for utterly valueless and meaningless development. A better circulation is desirable, especially to the brain. We need smaller feet and larger brains; else where are our deep thinkers and great lovers of humanity?

DEPARTMENT OF SCIENCE INSTRUCTION

SECRETARY'S MINUTES

OFFICERS

President—OTIS W. CALDWELL, associate professor of botany, University of Chicago, Chicago, Ill.

Vice-President—FRANKLIN T. JONES, teacher of science, University School, Cleveland, Ohio.

Secretary—GEORGE L. CANNON, science instructor, East Side High School, Denver, Colo.

FIRST SESSION.—TUESDAY AFTERNOON, JULY 6, 1909

The department met in joint session with the Department of Secondary Education in the Auditorium of the East Side High School, and was called to order at 2:45 P. M. by J. Stanley Brown, president of the Department of Secondary Education.

In the absence of Secretary Cannon, E. Waite Elder, instructor in physics, East Side High School, Denver, Colo., was appointed acting secretary.

After announcements by President Caldwell of the Science, and President Brown of the Secondary, Department, E. J. Townsend, dean of the University of Illinois, Urbana, Ill., presented his paper on "The Status of the High School and Its Relation to Colleges and Universities."

This was followed by a paper on "The Aims and Methods of Science Education in Secondary Schools," by George A. Cowen, of the West Roxbury High School, Boston, Mass. A discussion followed the reading of this paper.

President Caldwell of the Science Department then announced the following Committee on Nominations:

Ellsworth Bethel, Denver, Colo.

Riley O. Johnson, Chico, Cal.

Clarence D. Kingsley, Brooklyn, N. Y.

The department then adjourned.

SECOND SESSION.—THURSDAY FORENOON, JULY 8, 1909

The meeting was called to order at 9:30 A. M. by the president, Otis W. Caldwell.

At the request of the president, Charles E. Bessey, dean of the College of Science, University of Nebraska, Lincoln, Nebr., gave a brief history of the organization of the department at the Denver meeting fourteen years ago, and of its development, ideas, and ideals.

Otis W. Caldwell, associate professor of botany, University of Chicago, Chicago, Ill., then presented the president's address, "The Modern High School and Industrial Education."

A Report of the Committee on the topic, "United States Government Materials That Are Usable in Secondary Education," was next given by the chairman, Wesley N. Clifford, head of Department of Commerce, Southern High School, Philadelphia, Pa.

"Progress in Conservation" was the subject of an address read by Hugo Winkener, professor of forestry, Colorado College, Colorado Springs, Colo.

The Committee on Nominations then reported as follows:

For *President*—Benjamin M. Davis, professor of agriculture, Miami University, Oxford, Ohio.

For *Vice-President*—E. L. Brown, principal of North Side High School, Denver, Colo.

For *Secretary*—George A. Cowen, West Roxbury High School, Boston, Mass.

The report was adopted and the nominees declared elected officers for the ensuing year.

The department then adjourned.

ROUND-TABLE SESSION.—FRIDAY AFTERNOON, JULY 9, 1909

The meeting was called to order at 2:30 P. M. by President Caldwell, who spoke briefly in opposition to the proposed combination of the department with the Department of Secondary Education.

On motion, the president was directed to appoint a committee to learn the feeling of the members on this subject, and, if advisable, to present a protest to the Board of Directors.

The president appointed the following committee:

W. N. Clifford, Philadelphia, Pa.

Irving O. Palmer, Newtonville, Mass.

Lewis B. Avery, San José, Cal.

The first paper of the afternoon was given by Charles Emerson Peet, professor of physiography, Lewis Institute, Chicago, Ill., on the subject, "What Shall the First-Year High-School Science Be?" A discussion, led by Miss Julia Clifford, Minneapolis, Minn., followed.

"The Course in Elementary-School Science and Its Relation to High-School Science" was the subject of a paper read by Riley O. Johnson, head of the Department of Biology, State Normal School, Chico, Cal.

The report of the Committee on Secondary-School Geography was presented by the chairman, James F. Chamberlain, of the Department of Geography, State Normal School, Los Angeles, Cal.

Upon motion, this report was received as a Report of Progress, and the committee continued for another year.

The department then adjourned.

E. WAITE ELDER, *Acting Secretary*

PAPERS AND DISCUSSIONS

PRESIDENT'S ADDRESS

THE MODERN HIGH SCHOOL AND INDUSTRIAL EDUCATION

OTIS W. CALDWELL, ASSOCIATE PROFESSOR OF BOTANY, UNIVERSITY OF CHICAGO, CHICAGO, ILL.

Biologists who are conversant with what is known of organic evolution recognize that the right of an organism to live is determined by whether it possesses structures and habits that enable or permit it to work within the various exigencies of its surroundings. Our geology and our biology are constantly disclosing to us new stories of formerly prosperous organisms which perhaps chanced to possess the characteristics that permitted them to thrive. By the same authority we are shown that some present-day organisms retain habits and structures that may or may not have served some specific function in a former period, but now remain as records of what used to be. Present-day biological theory teaches us that plants and animals adjust themselves only in the sense that those which vary in the line of efficiency can persist; others, being less efficient, have proportionately less chance of success. The speed of elimination is proportionate to inefficiency. Each great geologic epoch

presents respectively types of life that in most respects were well fitted to live in that particular epoch. Organic responses resulted in these changing types of life as demanded by new conditions. This biological analogy is not fully applicable to the development of educational practice, but certain striking resemblances and certain striking differences are noticeable between our secondary educational system and the processes of biological evolution.

Striking differences are that the organization of a curriculum is a purposeful and planned procedure, while in biological evolution organisms affected do not make purposeful responses. In the evolution of plants and animals, the inefficient are not preserved by any unnatural or artificial processes; in education, an element or habit once efficient may be preserved by artificial selection.

Resemblances of this analogy are numerous and suggestive. A new procedure in education proves its right to a place thru its efficiency in relation to the demands of the times. Having proved its efficiency we accord the new subject its place. Such has been the history of each subject that has come into the high-school curriculum. But instead of leaving as records of the past those things that are not so fully efficient under new demands, and carrying over into new periods only those things that fit the changed and changing conditions, we too often have tried artificially to preserve all the old as well as to include much of the new—the “malady of total recall” in secondary education. When intellectual discipline was the dominant determinant in educational efficiency, subjects that were efficient were a logical response to their environment. But now education for present and for future work *in* and *thru* work has become equally prominent as a determinant of selection.

In the evolution of educational systems for the human race, it is perhaps not possible fully to apply the principles of organic evolution as they are shown by plants and animals; but it seems clear that in many important ways their principles do apply. Must we try artificially to keep alive things that have been dominant in efficiency in all of our previous social, intellectual, and industrial periods of development, and thereby curtail and inhibit the full efficiency of processes and structures that respond to the demands of a more advanced period in the educational development of the race?

What do we mean by efficiency in modern high-school education? It is that which will give the highest and best dynamic quality to those who are being educated. This dynamic quality involves intellectual training; it involves knowing things so that they are dependably and readily available for use, not only strictly utilitarianism, but social, historical, and aesthetic uses. Such dynamic quality involves efficiency in our own times, not in those of the past or of the future.

The history of education in this country shows clearly that changes have constantly been urged in the interests of some sort of vocational efficiency more or less broadly considered. The first colleges were established in order that the supply of ministers might be maintained—a strictly vocational purpose. Those young men who in the early days attended these colleges found them-

selves under the necessity of taking the course at first planned for preparation for the ministry, and indeed the vestigial structures of this early course are yet with us. Then came the earliest preparatory schools to relieve the colleges of some of their work, and that this purpose was also vocational is shown by the fact that their courses were mainly classical, so called, the pupils upon entering college being required to read Latin and Greek, and little else was expected of them. Then the people in some parts of the country, disappointed in that their boys in the preparatory schools could get little or none of the things that the parents felt were needed properly to prepare boys who, if going to college, did not expect to enter ministry or law, or perhaps did not expect to go to college at all, established the academy. The academy had served briefly the function which called it into existence, when it began also to assume the preparatory function, and soon it became a fitting school of so narrow a type that often its output at graduation had undergone for several years a process of trimming in order that they might fit the historic but no longer efficient pattern of some particular classical college. And so the people lost the benefit for their boys which they sought when the academy was established.

Once more they attempted to give the best dynamic education to their children by establishing the high school, at first independently, then as a public institution. These were established as a protest against a high-school education that did not educate in and thru those things that seemed most worth while in practical life. It was found that the course of study, at first full of appreciable significance to pupils and parents alike, must conform in order to meet the exactions of institutions to which a few of the students from the prominent families wished to go; and again the people lost the thing they had sought.

Science in the form of natural philosophy came early into the schools and many of our fathers found in it a point of contact between school and life. But could such a pleasurable pastime as natural philosophy have worthy educational values? It had no historic setting and moreover its very pleasureableness must put it without the pale of the elect. But its inherent interest, and its obvious connection with those things about which people who worked in the world had to think persisted, and finally in a new garb it was adopted.

Education thru manual training appeared and was scoffed at by those who kept the guiding hand on the high schools. Many of us as pupils have been severely censured for our shiftlessness because we spent valuable school time in rude carvings and constructions of wood, and in inartistic but exasperatingly expressive drawings, until the wise ones finally realized that the whole pupil was not educated by the old system. Before this recognition came, separate manual-training schools were established and then, partly thru conviction and partly thru self-defense, manual training in its broader content came into a welcome place in the curriculum.

As with science and manual training, so it may be with industrial education. The pupil is not wholly educated unless that education bears close

relation to his social and economic life. It has taken wholesale desertion from our school system to prove to us that so large an element of inefficiency exists. We have not heeded the demand that focused upon the academy, then upon the high school, and now upon the industrial school or the trade school. Education for dynamic place in the world's work must be had and schools must be had that will give it. If our presumably vestigial vermiform appendix makes us prolonged and serious difficulty we must remove it. We have too much else to do to permit us to give it so much of our attention as it may require. Our educational vestigial structures, appreciated and honored mementos of a former potency, must not unnecessarily weaken our efficiency.

Science knowledge in practical application has remade the needs of industrial life. The mule on the tow-path may be driven by one of little special training, but the electric elevator, the locomotive, the gasoline launch, the automobile, the electric street car, the trip hammer, the thousand other modern machines, and all modern agricultural and otherwise industrial life demand knowing and dependable operators, else they are machines of destruction. The material betterments of our age are constantly demanding more thoro training in those things that contribute to these betterments. Inventions and appliances to be useful demand higher types of workmen, else they are disasters.

Real efficiency, furthermore, demands educated workmen, not merely empiric tradesmen. Good general education is so essential that it seems clear that separate trade industrial schools may result in great loss both to trade schools and to our present schools. We need a people industrially educated, not a part of the people narrowly fitted for work in specific trades. Our social unit demands that we know enough of the basic elements of the work of one another that we may see "the other man's side of the difficulties." The absence of this general appreciation gives us most of our intellectual, social, and industrial difficulties. The fundamentals of industrial education for people of high-school age belong in our high schools, and place must be made for them. The high schools need these elements of a well-rounded education to save themselves from themselves. If necessary, industrial education may have to establish separate schools to demonstrate the function of this aspect of modern education. But the result must be readjustment of the present system so that it may fit better the period in which we live.

Our biological sciences touch life processes upon which much of the world's work depends—the manufacture of foods, elimination of carbon dioxide and addition of oxygen to the air, replenishment of soil fertility, the materials of the home, of manufacture, of transportation and commerce. Physical sciences touch the forces and processes found in all industries, and, together with the biological sciences, offer an element of intellectual training of highest value because of their ability to make thinking direct, dependable, and independent; and because this intellectual training is thus secured in direct contact with just the things with which the workers must deal when they are out of school. This last is one of the greatest values of applied science. The basis of real

industrial education must be educational as well as industrial. If it is narrowly industrial, it becomes trade training. Such trade training is quite necessary to the world's work, but the trade worker is best as a worker and best as a member of society when his trade training is the outgrowth of that real industrial education which is had as a part of general education. The high schools need the elements of industrial education in order that their subjects may have appreciable significance and may be worth while. Industrial education needs the high school in order that industrial education may educate as well as train. Separate industrial schools must not deprive themselves and the high schools as well of this common good that both may have.

THE STATUS OF THE HIGH SCHOOL AND ITS RELATION TO COLLEGES AND UNIVERSITIES

E. J. TOWNSEND, DEAN OF THE COLLEGE OF SCIENCE, UNIVERSITY OF
ILLINOIS, URBANA, ILL.

The high school, as we commonly use the term, is the outgrowth of American conditions. That it has thus far met a public need is at once apparent from the rapid increase in the number of such schools from 40 in 1850 to 8,804 in 1907.

To understand fully the changes which public sentiment is likely to demand in the character of the education offered by our public-school system, it is important to consider the changes which our national life is undergoing. Combined with the problems which our rapidly increasing population and large foreign element present, we have the remarkable advance which the technical arts have made in every branch of economic life. This advance has made itself felt not only in the industries and in transportation, but in every branch of agriculture and of commerce. On the other hand, the apprentice system which has supplied the older countries with their skilled artisans has come to have but little significance with us and is rapidly disappearing, while the efforts of trade-unions in this direction are at least of questionable value.

It is the business of the public schools to produce efficient, self-supporting, and intelligent citizens, trained to meet successfully the conditions under which they must live. As those conditions change, our system of education must change; more than that, we should anticipate thru the education we provide at public expense the conditions and needs of the future, and that in such a way as best to protect and foster those institutions fundamental to our national prosperity. The interests of our democratic institutions demand that we provide a system of education which not only trains leaders for the complex civilization which we are developing, but provides adequately for that training of the masses which assures every man an opportunity to become not only a useful, but a self-supporting, efficient citizen.

Good educational foresight requires that we see to it that the public schools, and particularly the high schools, of the country maintain a liberal attitude

toward those subjects which are vocational as well as cultural. There is at present a widespread interest in industrial and vocational education. Much has been accomplished, but we have not as yet come to the full recognition of our obligations and our opportunities in this direction. The public is willing to be taxed and that heavily for the training of men for what it recognizes as public service. The New England academies and colleges prepared men for service in the church because that was then the principal branch of recognized public service. We have long supported at public expense schools for the training of men for the liberal professions. In our state universities we have carried this movement one step farther and have asked the public to bear the expense of training men in agriculture and in engineering, to the end that we may provide leaders in these lines of industrial activities. We are just now beginning to realize that it is also a public service to train men for the less conspicuous places in the mechanic arts and trades, to meet the public demand that we should give every boy the opportunity to become a self-supporting member of the community.

The boy who is early compelled by dire necessity to leave school in order to earn a living is quite as deserving of our consideration, perhaps more, than is the boy who confidently looks forward to a college course and a professional career. Why should we not give every boy an equal opportunity to prepare for his future career in accordance with his tastes and inclinations? The one boy excels in history, civics, public speaking, and decides that he would like to be a lawyer or a minister; another develops great interest in science, or the languages, and wishes to train himself to be a physician or a teacher; another develops a fondness for commercial geography, business forms, and those studies of importance in commercial life, and decides to be a bookkeeper, a banker, or a merchant; another develops skill and dexterity in the manual arts and decides to become a carpenter or a plumber; while still another takes most kindly to botany, zoölogy, and agriculture, and prefers to become a farmer or a gardener. It is not only in keeping with the principles of democratic government but essential to the preservation of those principles that we should provide equally well for each of these individuals. It seems to be no longer a question with us as to whether such instruction should be provided for by the public, but rather as to how it may best be fitted into the existing public-school system. The public has given abundant evidence of its interest in such training and its desire to have it introduced. The question which is uppermost at this time is as to whether such work shall be introduced as departments in existing high schools, or organized as separate schools. Shall we establish separate high schools of agriculture as has been done, for example, in Wisconsin, and which was recently advocated in Congress? Shall we have commercial high schools such as are being discussed by the school boards of several of our great centers of population? Ought we to introduce the general policy of trade schools as Milwaukee and Philadelphia have done? Shall we commit ourselves to separate continuation schools of the German type as advocated by

some of our leading educators? Or is there some sound pedagogical reason why, under American conditions, the boy who is to be a plumber should be trained side by side with the boy who anticipates becoming a lawyer, or that the boy who is to help us shape our ethics of life by his instruction from the pulpit or in the schoolroom should be brought into close and vital relations as long as possible in his early training with the youth who in future years is to apply those ethics in his business enterprises or in his profession? One thing is true; namely, unless our high schools take a liberal attitude toward vocational and industrial training, they will not long continue in the present popular favor and will, like the New England Academy and the German Gymnasium, degenerate into mere fitting schools for colleges and universities. The public demand is for training which fits for the greatest efficiency in life, in the broadest sense of that term, and it is no longer a question as to what we shall do so much as to how it can best be accomplished. The dearth of skilled workmen which the rapid development of our commercial and industrial interests has created could without doubt be supplied by the establishment of separate trade schools. There is, however, a much more fundamental reason than purely commercial interests for introducing these departments in our high schools rather than to encourage the development of separate schools for this purpose. This question is closely and vitally connected with some of the important, unsolved problems of our future as a nation, if we are to meet fully the exigencies of our increasingly complex civilization. In these times of socialistic tendencies, it is worthy of the consideration of the men who are thinking not merely of the demands of the day, but who are attempting to take a long look into our future.

Considering the large foreign element which is entering into our national life and the problems which it presents, there is nothing which would tend more rapidly to fix sharp class distinctions upon us than to establish separate schools for commercial and industrial training. In this respect, we may well learn a lesson from the mistake of Germany in organizing separately her trade and technical schools. This fact has emphasized in German life an imaginary distinction between the artisan and those who enter the professional callings, and by tending to create a social barrier between the two has fostered a feeling of superiority of the one class over the other, and has delayed to that same extent the development in a normal way of the spirit of modern democracy.

It is the boast of the American people that the poorest boy may aspire to the highest positions of honor and trust within the gift of a free people. We point with pride to the men prominent in the affairs of the nation who have risen from the humblest surroundings. To maintain this condition, we must preserve the democracy of our public educational system, giving equal advantages to all and in all lines, restricting none save by the limiting conditions of personal ability.

The ethical and social side of the question is of fundamental importance. It is unfortunate to train the future lawyer in a different environment or in a different school from that in which the prospective merchant or plumber is

trained. What all three need is a close contact with each other during the time when their notions and conceptions of life are being formulated and determined, to the end that each may have a sympathetic interest in the problems and the difficulties of the others. Much is to be accomplished also by this contact in preserving the dignity of the manual vocations, and still more in cultivating that bond of sympathy and common interest which is essential in avoiding and settling labor disputes. We have quite as difficult a task in America to educate our laborer in the proper appreciation of the ethics of his relations to his employer as we have to educate the capitalist as to his duty to those whom he employs. The best place to do this is in the public school where all are on the same footing and the principles of democracy are recognized.

Some seem to fear that commercial and industrial departments of high schools would suffer in point of efficiency as compared with those of separately organized schools; that it would be the place where the weakest teachers would be assigned and the poorest students would go. Such educators need to study closely the development of our colleges of agriculture and mechanic arts. Twenty-five years ago many maintained that to be successful these colleges needed to be separately organized. No one seems to hold strenuously to that view today, for none are more prosperous or more efficient than those agricultural schools which are organized as a part of our state universities. Generally speaking, they are not only doing more for the advancement of scientific agriculture, but the standard of scholarship is higher among the student body and those appointed to the instructional staff. This is due in a measure at least to the scientific stimulus which comes from contact and comparison with the older academic departments.

It is perhaps not desirable, certainly not necessary, that the industrial departments of our high schools should be organized as trade schools where boys are turned out as finished plumbers or carpenters and girls become dressmakers and milliners. Our colleges of engineering do not turn out civil engineers. They aim rather to give their students that fundamental training which puts them in a fair way of becoming civil engineers. Where it is thought best for the high school to go further in this direction, a combined arrangement similar to that which has proven so successful at the University of Cincinnati would introduce all of the practical benefits of the trade school without its attending disadvantages.

Much is lost in the inefficient way in which the general cultural subjects are presented in the separately organized vocational schools. These subjects are regarded of secondary importance, and the point of view is too often restricted to industrial and commercial interests. As a result the student of manual arts gets less of general cultural training even tho he pursues as many branches.

Furthermore, the combined plan not only tends to cultivate a sympathetic interest in the vocational callings, but it enables all pupils to obtain a certain amount of industrial and commercial training in connection with their high-

school course. The average boy or girl gets much less training of this character in the home now than formerly. Our fathers and mothers were taught many things in the manual arts in connection with their early home life, which today are rendered useless by the general introduction of modern conveniences and the greater specialization of our employment. This lack of training is more apparent in our cities than in the rural communities, and the public schools must assume the responsibility of making good this deficiency if it is to be done.

This leads us to consider the bearing which the introduction of vocational training in the high schools should have upon college-entrance requirements. In discussing this subject, we must keep in mind that not more than one in twenty of the pupils who enter the public schools ever reach the high school, and of these not more than two out of every five go on to the college or university. In a country where the majority rules, the interests of the majority must be protected. However, in addition to the service which the high school renders in preparing for life, it has rendered and must continue to render the important service of preparing our boys and girls for college. In recent years the colleges and universities have come to exercise a great influence over the high-school curriculum—perhaps too great an influence. Certain it is that if pressure in this direction is greatly increased, either the high school will decline in popular favor or our state universities will be required by law to admit every graduate of a high school recognized by the state departments of education. In any case, we need to take a more liberal attitude toward accepting for college-entrance requirements those subjects which are primarily vocational. When we argue in favor of the disciplinary and cultural value of the classics, we forget that Latin was once quite as vocational a subject as manual training or stenography is today. It was given a place in the curriculum of the mediaeval schools not so much because of its own educational value as because it was a means to an end and was regarded essential to a successful career. We are likely to overlook or belittle the disciplinary value of those subjects which are of a more or less commercial or industrial importance and to discover their real cultural value only when they become useless for anything else. When the college had a fixed curriculum, it was essential that the entrance conditions should make sure of a certain content of knowledge. With the liberal system of electives now in vogue, this necessity has in a large measure disappeared, and what we need most is training rather than information.

It is natural for us to feel that the standard of a college course is somewhat lowered when we discover that one of our great state universities has announced its willingness to accept for entrance such subjects as stenography and typewriting. We have as yet scarcely come to regard these subjects as having an educational value. A closer analysis reveals the error. Eliminating the element of skill necessary for the professional use of these subjects, where is there any branch of study which gives the student better practical drill in

English composition, including spelling, punctuation, paragraphing, etc., than these? They are related to English composition in very much the same manner that shop practice is related to mechanical engineering. Manual training, mechanical drawing, etc., have come to be quite commonly accepted by our state universities and there is evidence of a movement toward a still greater liberality in this direction.

The high-school curriculum should be arranged to give to each boy at every stage of his development a preparation for the maximum efficiency in life, and those studies which contribute to that end should constitute the best preparation for college work. I do not mean by this to advocate the introduction of an unlimited amount of vocational work either in the high-school curriculum or in the college-entrance requirements. Clearly this element must be restricted just as we would restrict any other group of subjects. The University of Indiana has taken a very proper attitude in this matter. It includes in its entrance requirements of sixteen units two lists of subjects: one includes the traditional subjects—English, mathematics, foreign languages, history, and science—from which eleven units must be selected; the other list of five units is purely elective and may include any subject taught acceptably in a commissioned high school. Such an arrangement enables the high school to continue as a preparatory school to college without neglecting the other and even more important function of preparing the boy to render a genuine service to his community and to his country as a self-supporting, efficient citizen. In this way we shall indeed make our school system a unit for public service, reflecting the requirements of modern conditions, contributing to the upbuilding and the preservation of those democratic institutions essential to our national prosperity and our national unity.

THE AIM AND METHODS OF SCIENCE EDUCATION IN SECONDARY SCHOOLS

GEORGE A. COWEN, WEST ROXBURY HIGH SCHOOL, BOSTON, MASS.

Until half a generation ago one was admitted to the ranks of the educated because of the knowledge of languages long since dead; but the rapid development of varied industries has made it necessary to admit those trained by a study of biology, chemistry, and physics.

The world has for some years been asking what methods are being used to reach the desired end, and insistently demanding that these methods shall be of the best. It is, therefore, fitting that we, professing to know the answer to the questions, explain the aims and methods of our instruction.

The aim in the main is, by stimulating the power of observation, by encouraging the search for truth disclosed by an array of facts, by adding to the dexterity of the fingers by cleverly devised experiments, by researches into the history and biography of science, to build up the educated citizen.

There are too many for whom the sun still "draws water;" multitudes to

whom the scratches on the rocks tell no story of the glacier; as many more who have no adequate knowledge of the sources of the power that carries, warms, and lights them.

The scientist sees things as they are, states facts as he sees them, applies mathematical laws to prove them to be correct.

It is an aim of the secondary school to build up men and women of this type so that the reporter of the future will use not the extravagant language of a Julius Caesar, who slew so many of the Nervii, but the exact and careful language of a Newton who measures the attraction of a star.

It should be an aim of the school to fit boys to be of more value in the manufacturing plants and offices where they find work on leaving school; to make the girls better home-makers with their knowledge of biology, chemistry, and physics. No girl with an understanding of the growth of bacteria will be careless with the milk or the ventilation. Anyone today knowing the law of definite proportions and using the incorrect amounts of cream of tartar and saleratus in cooking deserves indigestion.

Every generation has its great problems in science to solve. The task is accomplished by a few rare minds. It is the duty of the school to find these and point them to their inheritance.

It is significant that Germany is in the process of arranging laboratory courses where the boy can do individual work. It means that the pioneer work done in this country during the last fifteen years is bearing fruit, and leads me to believe that this is the correct method of approach to scientific studies.

America can profit by adopting a German method of putting more emphasis on properly conducted exercises in the lecture-room—by no means college lectures, but talks in which the class shares largely and which form the basis of the next day's recitation.

The textbooks should be more simple. The more difficult matter should come from a live teacher, not a dead book. Many a boy has been discouraged by first meeting a hard problem on the cold page.

In physics the time-honored arrangement of topics should be changed. Specific gravity and mechanics should come near the end rather than at the beginning. A child is willing and eager to do anything—a mathematical problem, even—if he sees a chance of success. Problems that seem to the adult simple must for the beginner be approached by steps graded with the greatest ingenuity, but it is a mistake to think that science can be non-mathematical. One does not understand the laws of astronomy, earth-science, chemistry, and physics unless he has solved many problems that prove them.

Archimedes did not discover his laws by playing with tin fish in a tub of water. Lavoisier did not revolutionize chemistry by guessing at the weights of substances. Leverrier discovered a new planet only by difficult computations. Even our lofty mountains have been measured and weighed. A

method must be found so to wed mathematics to science that the ingenuity of those who would educate by play can never divorce them.

The maximum amount cannot be given at all, but it is a mistake to give the minimum amount to all. The school should be ashamed to send out a carpenter who could not calculate the strength of his material or a girl unable to estimate correctly the amount of material necessary for a gown.

It will not be strange if, thru the avenue of science courses, more industrial education finds its way into the school.

DISCUSSION

GILBERT B. MORRISON, principal of McKinley High School, St. Louis, Mo.—I am interested in the questions discussed by both speakers. The first paper gave my views, that the high school should find out what is proper to teach and then present those subjects. The trend of opinion is in that direction. Education must be democratic, so that the boy who studies Latin or English shall have a proper respect for the boy who can make a good tool in the shop. Industrial courses should be given in the same school with literary and scientific studies. All courses should be under one head and in one building, so that readjustments that may be necessary in any pupil's work may not throw him out of his accustomed intellectual and social environment.

The paper by Dean Townsend gave the idea that high-school authorities should fit school courses to local needs and that all high schools should be alike. I wish to express my gratitude that the trend of opinion should be in the direction of democracy in education. Separate schools are all right in large cities with ample means to carry on special work, but even in such schools all the departments should be under one head. The next step in education will undoubtedly be to incorporate in our schools the trades element. The only question is whether this shall be done by establishing such courses inside or outside our present system. The same question came up when laboratory science was introduced as the method of science teaching. Is there any reason why a boy who expects to be a plumber cannot recite English with a boy who expects to be a minister? The boy who studies mathematics because it is required will be the gainer by studying in the same class with the boy who expects to be an engineer. The next step will be to differentiate our high-school courses—to take more of the mechanical and less of the academic, or the reverse. When we have all pupils together under one roof, we can best find out for what a boy is best fitted. The pupil can pursue mechanical subjects and still maintain the unity necessary in a democracy.

I wish to take exception to one point in the paper by Mr. Cowen. At the very first of the subject I would impress upon the class the utility of the thing to be studied. If we cannot make a boy believe in the usefulness of a thing, we are wanting in resourcefulness. I would teach him the application of the principles instead of hoping that he will apply them later in life. First find out what the boy knows or ought to know and formulate the principles around that. Formulate the reasons for the study and give them to the boy or girl. In short, I would begin the subject concretely instead of abstractly.

JOSIAH MAIN, University of Tennessee, Knoxville, Tenn.—Reference has been made to the historical origin of the high school. It is true that the high school has inherited the task of college preparation from the old New England academy. Hence we measure things by what they will bring in the terms of admission requirements—by the credit system. The schools are trying to put a credit value on everything they do. But the credit system is artificial and must be readjusted, so that the proper value may be put upon the making of a chain or a piece of mission furniture. It may be difficult to break away

from the artificial system of units and find a new way to estimate the value of subjects, but it should be done.

W. H. BARTHOLOMEW, principal of Girls High School, Louisville, Ky.—There will be no difficulty about these matters if we agree to the principle that the function of the high school is to prepare for life, not for college. The high school is the people's school and it must continue to be so. The presence of industrial subjects in the course of study need give the educator no concern. So long as these subjects have a place in preparing the pupils for life, they have a place in our schools. The chief concern of those who supervise public education must be to establish a condition of democratic fellowship in every institution. This is of more importance than the course of study.

REPORT OF THE COMMITTEE ON THE TOPIC: THE UNITED STATES GOVERNMENT MATERIALS THAT ARE USABLE IN SECONDARY EDUCATION*

WESLEY N. CLIFFORD, HEAD OF DEPARTMENT OF COMMERCE, SOUTHERN HIGH SCHOOL, PHILADELPHIA., PA., *Chairman*

(An abstract)

The Committee made a report of great value, submitting a list of publications which would be sent free of charge to teachers and pupils on application to the Department of Agriculture, Washington, D. C. This list will be printed and distributed free of charge by the same department. The Committee offer the following suggestions:

1. Address requests to the Office of Experiment Stations, Washington, D. C., as this is the special bureau of the Department of Agriculture which is charged with carrying on its educational work.

2. State your own official position, special line of teaching, etc. Sometimes bulletins for which a price is ordinarily charged are sent free if it is known exactly to whom they are sent and what use is to be made of them.

3. State specifically the subject on which information is desired. If possible, refer definitely to the title or number of bulletin, circular, or document, and the bureau which issues it. Do not ask for all of the reports on any subject. Write first for the *Bulletin of Publications*, and then you can ask intelligently for what you want.

4. Avoid requesting a large number of publications on different subjects at the same time, or a list of different bulletins whose use is to be distributed over a long period of school work. As far as practicable, individual requests are preferred, rather than requests to supply a large number of bulletins to persons who may not be specially interested. It is well to have individual

* NOTE.—The valuable list of government publications which accompanied this report is not published here, because the committee, thru its chairman, Mr. Clifford, has secured assurances from Director A. C. True, of the Office of Experiment Stations of the Department of Agriculture, at Washington, D. C., that the list will be enlarged, classified more fully, and published as a circular to be available for free distribution to teachers and others interested in agricultural education.—THE EDITOR.

pupils write for bulletins in which they may be interested; or, send in the names of pupils to whom the reports may be sent.

At the Denver Convention, copies of the list of publications were distributed and a general discussion followed, of which the following is a brief report:

DISCUSSION

ELLSWORTH BETHEL, instructor in biology, East Side High School, Denver, Colo.—The Department of Agriculture, the experiment stations, and the agricultural colleges are all willing and anxious to help the teachers by supplying such publications as they can use. Some of the most helpful aids are the post-route maps, which give distances; the forestry maps; topographical maps, which give contour lines and elevations.

Great interest may be aroused by studying the insects that affect the crops in a particular locality. In Colorado, we study the sugar beet's enemies. In Texas the boll weevil may be studied.

Every teacher of physiology should have the bulletins on hygiene, dietetics, etc., issued by the Department; and every teacher of science should be on the mailing list of the Department of Agriculture, the Bureau of Forestry, and the Geological Survey, so that he may receive their lists of publications.

CHARLES E. BESSEY, dean of College of Science, University of Nebraska, Lincoln, reported that in the University of Nebraska the individual student writes for those publications in which he may be interested. A very interesting bulletin is the one on plant zones.

JOSIAH MAIN, of the Department of Agricultural Education, University of Tennessee, Knoxville, spoke of a collection of seeds, arranged in cases for convenient study, consisting of two parts—weeds, and economic seeds—costing \$3. This set is usable either in the high school or in the elementary grades.

OTIS W. CALDWELL, of the University of Chicago, illustrated the advantage to the pupil of the study of some specific subject, by the aid of government reports and other material. A seventh grade began the study of sugar. One pupil collected all the various substances which are or might be the sources of sugar. By correspondence, he secured photographs and other material from various sugar-producing localities, and from these photographs made lantern slides, which he used to illustrate four talks on the subject before his classmates. The correspondence and talks resulted in great improvement in his English. He is now studying the beet-sugar industry in Colorado. He has a dynamic interest in the subject, which will result in his doing something along this line, or some other.

PROGRESS IN CONSERVATION

HUGO A. WINKENWERDER, PROFESSOR OF FORESTRY, COLORADO COLLEGE
COLORADO SPRINGS, COLO.

Standing as we do, today, at the height of western civilization, in the midst of conveniences which give us apparent independence of nature, we are prone to forget that the control we have achieved over our physical surroundings makes us more dependent upon nature than is the savage of the South Seas. Our present wealth and well-being are directly due to our superb natural resources and the use we have made of them. Our future progress, nay, even the maintenance of our present high state of development, is just as dependent

on these resources as has been our past. Man has laid Nature under tribute, and has become powerful because Nature was rich; but if we impoverish Nature, her tribute must cease.

Most unfortunately, it is only during the past few years that the country has awakened to the fact that many of our resources are diminishing and being destroyed so rapidly that in some instances the time can be predicted almost to a certainty when, under present conditions of use, misuse, and waste, some of the things we look upon as necessities of life will be gone. But fortunately, under the leadership of a few patriotic men, headed by ex-President Roosevelt, the realization of that sad fact has awakened the country to immediate action.

On the morning of Wednesday, May 13, 1908, President Roosevelt called to order the first conference for the discussion of this most important problem. In the East Room of the White House at Washington, there was assembled on that day the most illustrious and the most representative gathering of the nation's leading public men ever brought together. This Governors' Conference for the Conservation of Our National Resources marks the beginning of one of the most striking and important chapters in the history of the world; and with it we pass from an era of commercialism based upon waste to an era of industrialism based upon conservation.

Conservation means the highest utilization of our resources. It is the opposite of waste. It does not mean non-use. It means a wise use. It is the aim of the conservation movement to perpetuate our natural resources and to make possible their use to the greatest number of people.

We should not be surprised that ex-President Roosevelt looks upon the inauguration of the conservation movement as the greatest act of his administration. What are the ordinary political problems—the extension of woman suffrage, the tariff, and the questions of coinage, currency, and banking—compared with the perpetuation of our great natural resources? The former are all merely passing incidents which alternately become prominent in the public mind only to sink back into obscurity, causing, comparatively, but a ripple in the progress of the nation's welfare. But our resources are at the foundation of our very existence; upon them depend the future of our national welfare, the very life of our children and our children's children.

Therefore it is gratifying to know that in this age of profit-getting we have some men who have had the keen foresight to recognize the necessity of restrictive measures, and the patriotism to put aside petty politics in favor of the solution of a problem which reaches out into the future, out beyond our own materialistic dreams into the realm of the coming generations, so that we may not be taken to account for squandering a national heritage which we are holding in trust, and which it is our duty to hand down to posterity in as good a condition as we have received it.

Following the conference of May 13, President Roosevelt appointed, on June 8, a Permanent Conservation Commission.

On June 19 the Executive Committee of this Commission met in Chicago

and determined upon a plan of action. The first step was to be an inventory of the nation's resources. By order of the President the heads of the various scientific bureaus of the government were directed to have their forces make such investigations as the Commission requested, and a large number of experts were sent into the field during the summer and autumn of last year.

The entire Commission met in Washington again on December 1, when the experts and secretaries of the different divisions reported to the Commission and the Commission formulated its first report. This was transmitted to the President on December 8.

On February 18 to 22 was held a North American Conference including, besides the United States, Canada, Mexico, and Newfoundland. On February 19 the President requested the powers of the world to meet at The Hague to consider the conservation of world-resources. This Conference bids fair to rival the famous Peace Conference and will, undoubtedly, accomplish far more direct results.

Despite all present and possible opposition, the future of the movement is assured. Already forty states have conservation commissions; beside these there are forty-eight commissions representing large national organizations. These commissions are co-operating through a Joint Committee on Conservation with an office to serve as a clearing-house for all joint business. The committee proposes plans of work, for submission to the different commissions. The plans comprise suggestions for an inventory of resources within the purviews of each commission, containing definite statements as to what we have, where it is, what we use and waste, and what we need to do.

The list of conservation commissions is constantly growing, and the plans submitted by the Joint Committee are expected soon to be in operation in practically every state of the Union. Some of the national organizations co-operating with the Joint Committee are the National Board of Trade, the National Association of Manufacturers, the American Federation of Labor, the National Council of Commerce, the great lumbermen's organizations, like the Yellow Pine Manufacturers' Association and the West Coast Lumber Men's Association, and many others representing all the great national resources of the country, and I sincerely hope that the National Education Association will soon be added to the list.

Thus far the greatest progress in conservation has been made in connection with the forest resources and the reclamation of the arid lands. Up to 1907 twelve states are reported as having created state forest reserves. New York stands at the head with 1,500,000 acres; next comes Pennsylvania with over 800,000 acres; third, Hawaii with nearly 400,000 acres; and fourth, Wisconsin with 300,000 acres. Even the little state of Connecticut has about 1,500 acres, and Indiana, whose soil is practically all better adapted to agricultural crops than to forests, has a reserve of 2,000 acres. This is little more than a demonstration area, to be sure, but it serves admirably the purpose of showing the farmer the value of the wood-lot when it is properly cared

for. When we consider that in 1905 the farmers of the country received for timber cut from their wood-lots, as a secondary crop of the farm, over \$100,000,000, an amount nearly equal to one-third of the value of the wheat crop for that year, it seems that every state in the Union should have a demonstration area which the farmer may take as an example.

Twelve states now maintain forest nurseries for the distribution of seedlings and for planting on the state lands. Forty states have officers charged with forest work and in seventeen of these their first duty is in forestry. If now we add to this the work being done by the federal government with nearly 200,000,000 acres of national forests that are being cared for by a force of men trained in technical schools of forestry, and the millions of acres of desert land made fertile thru irrigation, it shows that we have not been idle.

Much, then, as has already been accomplished, the spread and the future of the movement depend upon a systematic education of the public. Such education must proceed along two distinct lines: education for a more scientific use of our resources, and education toward a better realization of the large significance of the conservation movement.

This education may be largely centered on the forestry side of the movement; for our forests touch our national interests at many points. Because of the influence of forests on industry, on water for power, irrigation, and navigation, on erosion and soil, and because the forest is a great renewable resource, the whole conservation movement must look to progress in forest conservation as the foundation upon which progress along other lines must rest. Furthermore, the opponents of the movement are directing their efforts chiefly against forestry. This is very natural because by restrictive measures in the National Forests the Forest Service has successfully prevented a monopoly in the use of timber, range, and minerals, and the water for power and irrigation, and has reserved their use to the greatest number of people. Opposition to the conservation of these resources is especially aggressive because they are ready for immediate exploitation, wherefore the opponents of the movement wish to have them left to private enterprise as an instrument to profit. It is the existence of consciously selfish opposition which explains, very largely, the existence of opposition on other grounds.

How the needed education may be carried out is well illustrated by the methods used in furthering forest conservation. The Forest Service when first organized as the Division of Forestry was little more than an educational bureau. Its chief object was to obtain information concerning the forest conditions of the country, to learn thru investigation and experiment how these conditions could be improved, and to send this information broadcast thru printed circulars, popular lectures, and object-lessons. The work was then further advanced by interested associations and by public-spirited citizens and is now about to become a part of the instruction in the public schools.

Time was when schoolmen might have objected to the introduction into public-school instruction of anything in the nature of propaganda. Happily

however, our methods in education have undergone radical changes, and we have come to realize fully that the object of instruction is not so much the presentation of bare facts as it is to interest the pupil in the work of the world and to equip him with the "stuff" that will enable him to cope successfully with the problems which later confront him in his life as a citizen. I firmly believe that this end cannot be accomplished unless we correlate the work of the classroom with the work going on in the world outside. The teacher, very often, is prone to forget that the world is full of useful object-lessons which are based on the very principles she is expounding, and the child thus loses an opportunity for the training he should receive in making practical applications of his knowledge. Very often, too, the teacher is not even aware of these great problems. Yet how can we expect her to keep in touch with anything but the textbook when she is required to conduct classes for seven hours a day, to spend two or three more in correcting notebooks and examination papers, and four or five in preparation for the following day?

In this connection I should like to make a plea for the teacher. If we expect our teachers to do justice to their work we must place them in a position to keep abreast of the times. That means more pay and more time for daily study.

The tendency in modern education is to place the teacher more and more upon her own resources. I can well remember the time when textbooks were handed out to pupil and teacher in twenty or more cut-and-dried lessons. Today many of the textbooks and laboratory manuals are prepared more especially as reference books with the view to presenting a suitable outline which may serve as a basis for study and instruction. We have come to realize that the diversity in age, maturity, and endowments of the pupils, the personality of the teacher herself, and the local conditions under which she is working demand textbooks that are flexible, and teachers that are up to date. However, in the hands of teachers whose resources are very limited such textbooks are perhaps worse than those we have cast aside.

That the conservation movement is as important as many of the subjects taught in textbook and classroom and that our public schools and universities offer the best opportunities for furthering progress in conservation, I think no one will question.

In the public schools, I should like to propose that we take up studies in conservation only in connection with related subjects. In the classes in American history, in economics, and in general geography, for example, the importance of the conservation of natural resources and the relation of the conservation movement to the state and to other matters of social and political concern may be discussed. In the classes in physical and commercial geography and in manual training, in chemistry, botany, and agriculture the solution of problems concerned with a better scientific utilization of our resources should receive proper attention.

The general plan to be adopted will need to be determined largely by local

conditions. These differ very widely in different parts of the country. In New York, Pennsylvania, and the New England states, for example, the people have been fairly well educated up to a realization of the needs of their locality and of the country in general. In the Rocky Mountain region, on the other hand, and especially in Colorado, where opposition is exceptionally strong, the propaganda side of the question must be duly emphasized. Colorado may serve to illustrate the relation of local conditions to propaganda for forest conservation.

We have in Colorado, in the first place, a class of persons who have come west in search of nature's riches. For many years they have had a free and unrestricted use of the public domain—of its timber, its mines, and its range. It is most natural, then, that they should at first resent restrictions suddenly placed upon them by the Forest Service. Altho there are many of our people who are in sympathy with the forest movement, and some who have been fighting a battle royal to bring about better conditions, there are those who are ardent opponents, a small body which is working as diligently to ward off any progress, as are the others to push ahead.

In the second place, our state has nearly all industrial advantages (except navigation) found in all other states combined. We have a large block of semi-arid prairie; we have agricultural fields that compare favorably with those of any state in the Union; our mines and our water power, our mountains, our scenery, and our sunshine are nowhere excelled. In short, we have combined within the confines of our state such a diversity of people and climate and industrial conditions that the problem is fully as important and far more complicated than it is in any other state in the Union.

In prairie states like Kansas and Nebraska, the chief problem is forest-planting; in the forested hills of New York the chief problem is fire protection; in the almost totally denuded state of Michigan, it is reforestation; in the agricultural states of Ohio, Indiana, and Iowa, it is the farm wood-lot; in California, it is irrigation and mining; but in Colorado we have each one of these problems staring us boldly in the face.

Here, then, education for propaganda may show that the forests of Colorado form one of the most important resources of the state. It should emphasize the relation of the forest to the mining, agricultural, live-stock, lumber, water-power, and irrigation industries. Without her forests Colorado could not boast of the great possibilities she has for the development and maintenance of these industries. But with much of the land that is not suited to agriculture covered with forests, our state should be able to develop all its resources to their full capacity.

How the schools may forward education along the lines suggested may be illustrated by the possibilities afforded by instruction in manual training, physical geography, and agriculture. When the pupil is taught the mechanical use and application of wood he should be taught also, as of the greatest importance for commerce and industry, the total available supply of any given

species, the relation of supply and reforestation to prices of raw material, the cost of production, and similar questions of vital importance. While he is learning of erosion and stream flow in physical geography he should also learn of the importance of forests as they influence run-off and seepage, the washing of the soil, floods, water for power and irrigation, the filling of our harbors and reservoirs with silt, the influence of these conditions on local industry, and how and where in the country at large and in his immediate locality the forests will be most effective as a means for controlling the forces of nature. In the classes in agriculture the influence of the forests on these same conditions may be treated from the standpoint of the improvement of the conditions on our farms by proper methods of forest culture, and the value of the farm wood-lot and some of the fundamental technical considerations for profitable wood-lot management may also be included.

In the course of my talk I have tried to emphasize the importance of introducing the subject of conservation into the public-school curriculum both from the standpoint of the pupil and from the standpoint of the conservation movement, not as a separate subject, but in its relation to subjects that are already being taught.

Before closing, I wish to emphasize again the importance of keeping our school work in touch with the great problems which are confronting the people, and that the conservation movement, according to President Roosevelt himself, is the greatest of all the great problems which are now before us. I should like to suggest further, if I may, that a Conservation Commission—such as has been organized by all the great national organizations—organized as a regular department of the National Education Association to co-operate with the Joint Committee on Conservation could do more to place this necessary information in the hands of the teacher and show him how to use it than any commission or body now in existence; and by so doing, such a commission as a department of the National Education Association would become one of the most effective in furthering progress in conservation.

WHAT SHALL THE FIRST-YEAR HIGH-SCHOOL SCIENCE BE?

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The great fault of the work of our students, especially in the earlier years of the high school, is that it is done under low pressure, too often with the spirit of the day laborer and not with the spirit of the man working for himself. This half-hearted way of working is neither the kind that produces the greatest growth of the worker nor accomplishes the best results.

If our purpose in teaching is to furnish the best conditions for growth, the most rapid and healthy growth, and to develop the talent latent in the individual, the student must be inspired to put forth his best efforts with enthu-

siasm, with hope, and with pleasure, and to work with that intensity which we know results in an increase in capacity.

The inspiration for work may be the inspiration of the lash, or it may be the inspiration of interest. If the former, the labor will be slave labor. If the stimulus is that of interest, the work will be that of a free man—a self-responsible man. I leave the treatment of the subject from the former standpoint to those who are skillful with the lash. For those not skilled with the lash, I believe all would agree that the best way to make the student work is to give him something to do that he wants to do.

The fundamental problem, then, is what science subjects do appeal to the student in first-year high school in such a way as to inspire him with hope and ambition and cause him to put forth his utmost efforts. It is no simple problem, and can be solved only by experiment. The daily life of the student in the city is so different from that in the country that the subjects which appeal to the country boy may not appeal to the city boy. The daily life of the girl is so different from that of the boy that her interests are not necessarily identical—perhaps they are necessarily not identical—with the interests of the boy, and if so, why should the attempt be made to cast them in the same mold?

In solving the problem of what science subject is best for the first year of high school, one great disadvantage under which we have worked is that we have not known, and do not now know well, what things most appeal to the student. We have not been studying this question enough. Too much of our time has been given to a study of the question how to teach our subjects and too little time to a study of the student's interests and needs. The student himself of course does not know what he wants. He knows what he does not want. He sometimes knows what he wants when he sees it.

While we know something about the interests of the student when he comes to us we do not know nearly enough. We know that it is a characteristic of young people that they demand quick returns or their interest flags. Their desires so often run ahead of their ability to handle a subject that their interest lags before a distant goal can be reached.

It is true also that the interests of the first-year high-school student are what we would call superficial. They spread over a large area and do not go deeply. This may not be satisfactory to us. It is very disappointing, perhaps, but we cannot help that. We must take the student as he is and not as we might wish he were, and if we are to produce the best results we must adapt the work to him, not the student to the work.

Another of the principal characteristics of the first-year student, altho it is not peculiar to him, is his optimism. It is a fundamental characteristic which must be taken into account in considering the work best fitted to his needs and which will produce the best growth. The work that shall fire his ambition, awaken his enthusiasm, stimulate his imagination, enlarge his views, engage his attention and utmost efforts, will impress him with his own possibilities, show him the great opportunities for the enterprising, intelligent,

energetic young man, and will not make him any the less an optimist, but should base his optimism regarding himself on the safe and more solid foundation of actual accomplishment thru earnest effort.

The fourth great thing that must be remembered in connection with the first-year high-school student is that he has studied books largely all his school days. In daily life he has been surrounded by many wonderful and fascinating things which he has longed to understand. As Hall says, he "would go far to see scores and hundreds of demonstration experiments and would like to repeat them in his own imperfect and perhaps even clumsy way." This desire to experiment, to try things and see what will happen, often gets him into trouble in the city.

It must also be kept in mind that, in the great majority of cases, the student on entrance to high school is at the very threshold of his work in science. It is important that his first impressions of this "wonderland" be favorable, that he be happily introduced into its mysteries and methods, and that the fire of his youthful eagerness be not quenched.

The two subjects which lead as first-year sciences are biological science and earth science. Each of these subjects requires some knowledge of the other sciences for the most effective work. Each appeals strongly to a student only in so far as his life has turned his interest in these directions. Neither one, as ordinarily taught, lends itself extensively to that experimenting which makes science seem to the young student a veritable "fairyländ." Neither one alone within the strict limits of the subject gives him that glimpse into the wide field for which the student longs. Neither one alone is so well fitted to stimulate his imagination, fire his ambition, engage his whole attention, and cause him to work with such intensity as would a wise selection from the whole field of science.

In view of the nature of the student's interest, then "may we not well raise the question¹ whether the science now taught in the first year of high school (the place in the curriculum appropriate for a general introduction to science) is broad enough to meet the needs of the young student; whether it would not be better frankly to make it a general introduction to science, which shall have its roots in the wonders of astronomy, and in those portions of physics and chemistry which appeal to the young student, the portions full of demonstrations and laboratory exercises of the kind which delight his heart, arouse his enthusiasm, and increase his desire for more and deeper knowledge? Is this not indeed the time to open wide the door and let the student look in at the many good things that are ahead and to start him happily on the way to acquiring the methods of science? The subject-matter could not well stop with the roots of this tree of knowledge, as it were. In those schools where

¹ See paper by C. E. Peet and W. S. McGee read before the Central Association of Science and Mathematics Teachers, December, 1905, printed in *School Science*, May, 1907; and a paper by the writer read at the Educational Conference of the Academies and High Schools in Relations with the University of Chicago, November, 1906.

the trunk of this tree of knowledge is now physiography, should not the branches and foliage be permitted to grow in the form of the study of life so taught as to bring out the relations between the physical features of the earth and the life upon it, especially the human life of the present, with its manifold activities?"

For boys in the city, greater emphasis might be placed on physics; in the country, the study of life, or possibly agriculture might be the central subject. For the girl in either city or country, domestic economy might well be the nucleus about which the work is grouped. But let it be discovered by experiment the sort of work best adapted to the interests of the student. Whether in city or country, for boy or for girl, if physiography is the central subject it should culminate in the study of geography. To this one thing the writer is unalterably committed. To do otherwise would be to build the foundation for the house and fail to build the house.

This plan of a broad introductory science course is in accord with the methods of the best scientific investigation, which involve first a general reconnaissance of the field before taking up the detailed work, and is also in accord with the nature of the high-school student's interests.

That there is a growing feeling of need of something of this sort is indicated by a variety of things from various sources. The physiography laboratory manuals that have appeared within a few years have with a few exceptions given a considerable amount of work in elementary physics and some elementary chemistry. In the science teachers' associations, especially in the West, the matter has been under discussion.¹ From the teachers of science in the later years of the high school there has come a demand for their own purposes of an introductory course in the physical sciences, which will be referred to later in this paper. In some places in the Middle West the need of a general science course has long since been felt and such courses have arisen spontaneously and independently in several high schools.² Under the direction of Mr. Caldwell, of the School of Education of the University of Chicago, such a course is being worked out in the University High School. At the high school in Oak Park, a suburban town near the western limits of Chicago, "such a course has been much experimented upon in the last few years, and while it has not yet attained perfectly definite shape in all its parts; the evolution of the course is nearing its completion."³ The central subjects in this course are the biological sciences—botany, zoölogy, and physiology—with some physics

¹ *Loc. cit.*, and paper by Chas. I. Hays, of the North Denver High School, read before the Colorado Teachers' Association in December, 1908. In California a committee has the matter under investigation.

² A circular of the "New Movement in Physics" reports six high schools known to be giving such courses. Professor Frederick Sanders, principal of the Lincoln, Nebr., High School, reports the success of such a course for four years past. In the Columbus, Ohio, High School also, such a course is given with physiography as the central subject.

³ See "Elementary Science in the High School," by Miss Chandler, in the *School Review*, February, 1909.

and chemistry. At the Lewis Institute in Chicago a course in introductory science has been evolving which has had as its central subject physiography, reaching down into some elementary phases of physics, chemistry, and astronomy, reaching up into the study of life, and culminating in the study of general geography. This course has been gradually shaped, not to meet the demands of instructors of science in the later years of the Institute, but to satisfy the demands of the young people studying physiography in the first year of the high school, many of whom are boys entering the school with the ambition to become engineers. This course is still in an experimental stage but it has evolved far enough to make it certain that a great step in advance has been taken in satisfying the demands of the young city boy.

So far, emphasis has been placed in this paper on the demands of the first-year high-school student, but the subject may be looked at also from another standpoint. To know any one of the sciences thoroly it is necessary to know something of the others. For this reason the instructor in each science desires to have his subject placed in one of the later years in the high-school course. This is desired not only because of the greater maturity of the student but also because of the advantage of the student's previous preparation in the other sciences. The third or fourth year is commonly given to high-school physics because of the need of preparation in mathematics, and because it is so exacting as to require greater maturity of the student. This demand of the later science courses for previous preparation in the other sciences would be met by a first-year general science course and is especially urged in the circular of the "New Movement in Physics." The committee on the definition of units in the sciences have asked for authority from the North Central Association of Colleges and Secondary Schools to work out a unit for introductory science.

The demand for introductory science work earlier in the high-school course has arisen from the teachers of physics, because the widespread introduction of laboratories for the physics and the growth of the work in technicality has led to courses which are so exacting that an introductory course seems necessary.¹

It may be urged that the demand from the instructors in physics for such a course is no argument for it. Let them adapt their courses to their students rather than ask that the students be adapted to their courses. Is it not, however, an unusually fortunate circumstance that the interests of the students in the earlier years of the high school seem to demand the very thing which will best fit them for the work which the physics instructors have prepared for them for the later years?

It is not from the instructors in physics alone that the demand for this introductory science course has come. The greater freedom it would give in the placing of the sciences of the later years of the high school has been recognized. The advantage it would be in allowing chemistry to precede

¹ See Lewis B. Avery, principal of the San José High School, in *School Science*, 1907, p. 196.

physics has been urged by Principal James E. Armstrong, of the Englewood High School.¹

For biology, also, there is a need of some of this introductory science work. Anyone can see that, as Miss Chandler, of the Oak Park High School, says, "For the understanding of any physiology, plant, or animal there is necessary a certain amount of elementary chemistry and physics." Indeed, the beginning of the introductory science course at the Lewis Institute, Chicago, can be traced back to this fact. The Institute is near several medical schools. Ten years or more ago, when the writer first began work there, the institute received from the medical schools students who needed a little more training in science before beginning their medical courses. It was in the endeavor to make the work in physiography useful to these young "medics-to-be" that the start was made in working out the introductory science course mentioned, which has broadened out to meet other interests.

To sum up the arguments for a broad introductory science in the first year of the high school:

1. It is in accord with the nature of the high-school student's interests, which "spread over a wide area, but do not at first extend deeply into any subject."
2. This plan is in accord with the methods of the best scientific investigation, which involve first a general reconnoissance of the field before taking up the detailed work.
3. It gives the student the broad outlook which is necessary for the most effective work in any of the sciences, and if wisdom is used in the selection of subjects and methods of presentation, it will leave the student with a desire for further work in science.
4. It gives an opportunity for the very large number of students who do not go beyond the first years of high school to get a look into the great field of science and introduces them to its methods.

Such a course will make it necessary for a student to bring to bear on the problems arising in it much of the knowledge he has already acquired, and the knowledge which he can get from day to day. It should make use of all the methods by which knowledge is obtained—books, maps, diagrams, pictures, conversation, observation, experiments, inference, and speculation.

In addition to arousing interest in a wide range of nature subjects and creating a desire for more by opening the door and letting him look in and see what good things there are in store, the course suggested should introduce the student to scientific methods, and "develop in him mental habits which should finally lead to intellectual independence."

Among the things to which it should lead the student are:

1. A confidence in the testimony of his own eyes and ears.
2. A belief in his own good sense, in his ability to reason from facts to trustworthy conclusions. There is no one thing which should be encouraged so continuously.
3. A habit of looking for the deeper significance of apparent facts and of inferring causes from effects and consequences from causes.
4. A habit of stringing the significant isolated facts together in some orderly

¹ *School Science*, February, 1905, p. 109.

fashion, building up from them definite mental pictures, and, in subjects lending themselves readily to this process, attempting to put these pictures in the mental cinematograph so that the actions of an agency or the cycle of changes in an object may pass before the mind's eye. Such an attempt is worth while even if it does not succeed fully.

5. A habit of testing quantitatively by rough calculations conclusions which can be so tested, and in building up mental pictures from isolated facts, a habit of getting the right proportions by the same method should be cultivated.

6. The habit of attempting to see things in the large—of looking thru the big end of the telescope and getting a perspective view of a thing in its entirety.

In addition to these things, such a course should leave with the student a mass of knowledge much of which should be continually used thruout life and be a satisfaction and a pleasure to him, and above all things, it should leave him with a desire for more.

And finally, in order that such a course or such courses may be worked out intelligently, a study of the student's interests and needs is urged. Let the question be raised: Are there interests natural to the student at this age which are increased by success in doing, or is interest based on success in accomplishment, whether the work be accomplished at first thru dull grinding or not?

The study of these questions offers that opportunity for investigation so much desired by many secondary-school instructors. The investigator's attitude of mind in the teacher changes the whole aspect of schoolroom problems. It may even make the reading of student papers a pleasure. Mistakes, before a vexation, now are items of interest because they show how the student's mind is working. It gives the teacher an appreciation of the personality of the individual student that is a pleasure and a never-ending source of interest, and results in bringing student and teacher nearer together, for there is nothing to which the student is so sensitive as to the real feeling of the instructor toward him. The instructor is thus placed in a position of advantage for discovering the hopes and ambitions that lie deeply concealed in the heart of the student. When these are known, the problem of satisfying the demand of the student or of stimulating in him demands that will result in his greatest growth may be solved by the methods which the scientist is accustomed to use in the solution of his problems. Is it not a reflection on the scientific methods of the science teacher that so much time has been given to studying how to teach the subject and so little time has been given to studying what the nature of the student demands at the successive stages of his growth?

DISCUSSION

MISS JULIA B. CLIFFORD, teacher of botany, East High School, Minneapolis, Minn.—Such a composite course as Dr. Peet has outlined for first-year high-school science is one for which I have argued many years. However, let it be stated emphatically

cally that the course should not consist of six weeks each of a half-dozen different sciences, taught as distinct subjects. Such a division would defeat the purpose of the course. A course can be worked out in such manner that the scientific bearing of each principle taught upon the other sciences will be shown. This will require much labor and thought from the teacher, but I have never known the science teacher who shirked either. A far greater difficulty would lie in the lack of requisite knowledge in the possession of the teacher; and here the colleges must help by making it easy for students to study in several departments, and by giving teachers' courses in the various sciences. Where the colleges, and students preparing to teach, have erred in the past is in too great specialization in some one science. There are numerous colleges today where a student who is specializing, say in physics, does not receive courteous treatment if he attempts to take general courses in chemistry; and feels a decided chilliness in the attitude of his instructors if he suggests venturing from a botanical to a zoölogical laboratory, or vice versa. If, as we have been hearing all this week, secondary education is the greatest work confronting this nation, our universities must learn that preparing teachers is the greatest work they have to do.

We have heard much talk that science has not made good in our schools. It would be nearer the truth to say that science has never had the chance to make good. One cannot fail to see that this is true if he will examine the curricula of forty or fifty of the leading high schools in the country. In scarcely one of them is there a correlated science course. A large majority have either botany or physiology in the first year, but these are not followed by any other science work in logical sequence. In very many of the schools some one science is offered in the third or fourth years, as an option with several other subjects; and this constitutes the science work which does not make good! Imagine the result if a student took some one language, say Latin, in his immature freshman high-school year, and then a year of French, or a half-year each of French and German, in his junior or senior year.

For this condition of science work in our high schools the science teachers are more to blame than anyone or anything else; and the very strongest science teachers at that, because strong teachers in any one subject are apt to succeed in pushing that subject to the front in their particular schools, to the neglect of other just as important subjects which should complement their work. Of course it follows, from what has been said above, that the limited college work of such teachers has contributed to produce this attitude. Science teachers, in the past, have woefully failed to work together.

Such a first-year course as Dr. Peet advocates would help the student amazingly to find out what he does want, and it would help both student and teacher in advanced science work by saving time for both. If, for instance, a student has learned the simple things concerning osmosis in first-year work, how much time would be saved in teaching absorption of liquids and root-pressure in botany. Again, if he knew the properties of a few gases, how full of meaning would the demonstrations of the work of making food by the plants become. Being a teacher of botany, I naturally draw upon that subject for examples. If such a first-year's work were followed by a year of either botany or zoölogy, and that by a year of either chemistry or physics, and further work offered in one of the sciences for the first half of the senior year, and the second half of that year's work given to a study of hygiene and sanitation, we would have a correlated course in science which would, at least, have a chance to prove the value of science as a secondary-school subject.

Science touches the child on every side of his life, and comes close to every experience of his daily existence. Are we not big enough, as students of science and as teachers, to look beyond our divisions of the subject and consider the real needs of the young people who tomorrow will be in our places?

THE COURSE IN ELEMENTARY-SCHOOL SCIENCE AND ITS RELATION TO HIGH-SCHOOL SCIENCE

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The discussion of the relation of the course in elementary-school science to that in high-school science naturally divides itself into three parts: First, their relation with respect to subject-matter; second, their relation with respect to the method of treatment; and third, their relation with respect to the end aimed at.

Taking up the last point first, it seems to be an already well-established fact that the course in elementary-school science *is* to be, and certainly it *ought* to be, determined by its relation to the life of the child. What its purpose should be has never been more clearly nor better put than by Dr. Hodge, in his *Nature Study and Life*, a book which has been an inspiration to thousands of teachers: "Learning those things in nature that are best worth knowing to the end of doing those things which make life most worth living." The end aimed at in elementary-school science, then, may be stated briefly as *preparation for complete living*. On *its* side, the high school seems to be just on the point of breaking away, if, indeed, it cannot already be said to have done so, from its time-honored custom of preparing its pupils for the university, to prepare them for the more important school of life. This new attitude, which the high school seems to be coming hastily to assume, will affect no one of its various departments more profoundly, yea, I believe not half so much, as the department of science. With respect, therefore, to the end to be attained, we find that the relation of the course in elementary-school science to that in high-school science is that of identity.

In the second place, since all of the sciences commonly taught in the high school stand in vital relation to the most ordinary problems of life, it follows that all these, in so far as their subject-matter falls within the comprehension of the pupils, are needed in the elementary school, and should be drawn heavily upon in constructing a course for the elementary school. Consequently, we should expect to find suggested in the elementary-school course, as well as in that of the high school, problems whose solution requires some knowledge of physics, chemistry, botany, zoölogy, and physiography, the last named including geology and meteorology. Again, since successful and complete living calls for the solution of problems arising from man's immediate environment, there should be found in both courses numerous problems having to do with the most common things in this environment. Thus we see that not only will the same branches of science be drawn upon in the construction of courses for elementary and high schools, but in many cases the particular *objects* suggested for study will be the same. Naturally, the problems suggested for solution by pupils of the high school will be more difficult of solution than those suggested for elementary-school pupils. Studying the same object

does not necessarily mean repetition. It is evident, also, that the better the work is done in the elementary school, the more difficult and intricate will be the problems which the pupils will be able to solve when they reach the high school. The high-school pupil will thus be fitted to work out, from the great abundance of evidence acquired in the grades, many generalizations which he was not able to grasp when he stood on the lower plane. With respect, then, to subject-matter, the relation between the course in elementary-school science and that in the high school is one of continuity.

In the third place, since all the sciences with which we are dealing here, whether we think of the elementary or the advanced portions of them, have to do with objective realities, it follows that the rational study of these sciences should begin with observation. This truth, I take it, will be accepted as axiomatic, and hence will need no discussion at this time. Observation being indispensable in any right study of science, the lesson, whether in the high school or in the elementary school, should always be conducted, when it can be done, in the presence of the real, living thing. Animals and plants, where possible and practicable, should be kept close at hand, generally the nearer the better, for continuous observation. Since, in the solution of problems of real life, independence of thought is desirable, the pupil of whatever age should be constantly drilled in this habit. To this end he should be told nothing which he can be led to find out for himself by the expense of a reasonable amount of time and effort. Thus, taking them one by one, the principles which should govern in the teaching of science are essentially the same for elementary and high schools, differing only, I believe, in minor particulars. With respect, then, to the method of instruction, we find that the relation of the course in elementary-school science to that in high-school science is again one of identity.

We are thus led to see that the course in high-school science is, in a broad way, the same with respect to subject-matter, with respect to method of treatment, and with respect to the end aimed at, as is the course in elementary-school science, differing only in the degree of difficulty of the problems which it places before the pupils to solve. This being true, it only remains to fix, in a rough way, the boundary between the two courses. To do this should give us no great difficulty.

Every subject must have a beginning place, and the beginning work should be of the most elementary sort. This is no less true of the sciences than it is of any other subject in the curriculum. As the study of formal grammar is preceded by what is commonly called language work, and as the study of arithmetic is preceded by number work, so the work in science should be preceded by what we know as elementary science or nature-study. In the study of botany, for instance, it is desirable to have the pupils learn the needs of plants by caring for them. Now, to pupils in the elementary school this can be made a most interesting part of the work, but if left until the pupil takes up the study of botany as a science it is less likely to please, because considered

beneath his dignity. Similarly the work in observation which is so desirable in botany, zoölogy, and physiography, if left till the pupil has reached the high school, is likely to appear trivial to him, and hence will lack the interest which he would naturally have given it at an earlier age. Because these things are true, pupils in the high schools have heretofore received insufficient drill in the elementary facts of the different sciences studied. And so it comes about that students finish the biological sciences, receiving credit in them, without having learned how to care intelligently for animals and plants, not having learned in their studies what the simple wants of these organisms are. In the physical sciences, it is not uncommon to find pupils who have taken, with credit, what are considered to be thoro courses in physics, chemistry, and physiography, without being able to explain the most common phenomena, such as what takes place in the burning of a lamp, or what occurs in the evaporation of water. In the ability to do these things lies the very essence of the connection of the school with life. It is at this point that the elementary school in its nature-study work can do a valuable service for the work in science in the high school, by presenting such parts of each of the sciences as naturally make the strongest appeal to the children in the grades, and which older pupils often consider as lacking in dignity. Of such a sort are, in physiography, the study by observation of the various phenomena of erosion, and its consequent influence on the formation and transportation of soils; in biology the simplest wants of the organism and the advantage to the organism of the simplest structures and of colors, the relation of the organism to its environment and to man; in physics and chemistry, the observation of common phenomena, illustrating in a simple way air pressure, capillarity, osmosis, chemical affinity, the idea of valence, and the meaning of some formulae and of the simplest chemical equations.

It is not impossible to give to pupils in the elementary schools a good working knowledge of all these things if the teacher herself understands them. One of the most interesting lessons I ever saw was one in which the pupils of a seventh grade were studying the burning of a lamp—a lesson involving some knowledge of the atomic theory and of chemical affinity, a knowledge of capillarity, and some idea of valence. The pupils had been given some idea of the molecular structure of all matter, and of the size and behavior of molecules and of atoms, the rise of the oil in the wick had been illustrated and explained, and the facts were developed that the light was caused by the intense heating of particles of carbon, coming from the wick and the oil, that the heat was brought about by the rushing in, from all sides, of atoms of oxygen, two atoms of oxygen joining themselves to one atom of carbon to form one molecule of carbon dioxide, which went off into the air. There did not appear to be the least difficulty in understanding the facts brought out and the intense interest of the class was shown by such questions as, "If all the molecules in the table are in constant motion, how can the table retain its shape?" "Why does not oxygen unite at all times with the carbon in coal oil and in cotton?" "What

causes the end of the wick to become black?" "If the oxygen of the air unites with the carbon of the wick as it does with the carbon of the oil, why should we bother putting oil in the lamp?" "What causes the flame when *wood* is burning?" The following is a list of experiments which are, generally speaking, entirely within the comprehension of the average seventh- and eighth-grade pupils.

Experiments to show that plants need water, air, warmth, light, carbon, nitrogen, sulphur; preparation of oxygen; illustration of oxidation; preparation of hydrogen, of nitrogen, of lime water, of carbon dioxide; experiments to illustrate osmosis and capillarity; preparation of phosphoric acid, potash, and saltpeter; illustration of and test for acids, alkalies, and salts, tests for acid and alkali soils and the correction of each; to show that soil water holds plant food; that amount of film moisture depends on size of soil particles; to show rapidity of percolation in different kinds of soils.

Experiments to illustrate evaporation; to show that plants transpire; to find where transpiration occurs; to show that water rises thru the plant stem; that transpiration exerts a lifting force on the water in the stem; how the plant lessens transpiration; that chlorophyll, sunlight, and air are necessary for starch-making; that growing plants give off oxygen; tests for starch, sugar, proteid, and fat, to show regions of food storage in plants.

Because of the more abstract nature of the work, I should confine such work as the above to the seventh and eighth grades of the elementary school, giving to the lower grades the work in biology and a part of the physiography.

I have now succeeded in showing, I think, that the science work of the elementary school stands in a vital relation to that of the high school, in that it relieves the high school of much necessary work which older children feel to be beneath their dignity to do, does much which the high school hardly has time to, and hence makes possible in the high school a more extended consideration of the principles to be derived from scientific study.

REPORT OF THE COMMITTEE ON SECONDARY-SCHOOL GEOGRAPHY

JAMES F. CHAMBERLAIN, DEPARTMENT OF GEOGRAPHY, STATE NORMAL SCHOOL, LOS ANGELES, CAL., CHAIRMAN.

The expression "the new geography" is now so infrequently heard that it may be of value to remind ourselves of its former significance. The appointment by the National Education Association, in 1892, of the Committee of Ten was an important event in the development of school subjects in general, and of geography in particular.

The report of the Conference on Secondary-School Geography crystallized and gave definite and authoritative expression to the belief, which for a number of years previous to this had been a conviction on the part of the few leaders in the subject, that earth science should be a broader, deeper, more helpful

study than it then was. It regarded the subject not as a mere description of the most striking features of man's physical environment, but as a study of the evolution of environment, and its relations to human conditions. It recognized the fact that if geography was to maintain a place in the secondary school as a subject for serious study, it must experience a decided change in character. As the laboratory method was being used with success in chemistry, physics, and the biological sciences, it was considered wise to apply it to geography.

The close relations between geology and geography, the fact that the former was quite well organized and that there was material available for laboratory work, together with the personnel of the conference, all combined to give the movement a decided trend in the direction of geology or physiography. Because there were no textbooks that treated the subject from the new point of view, the Conference recommended that physical geography, along the lines then followed, be presented in the first year of the high school, and physiography or geology in the last year.

In 1895 there appeared the first modern American physical geography. It presented geographic forms and processes very fully, but, practically speaking, with the exception of a brief chapter used in the nature of a summary and entitled "Man and Nature," it ignored their influences upon human life.

A comparison of this book with its predecessors, as well as with the more recent texts, is very interesting. The earlier books devoted considerable space to a description of the surface features of the several continents. Comparatively little attention is given to the origin and classification of land forms, while there is practically no reference to human response to its environment. Their treatment of the atmosphere is much briefer and less valuable than it is in the text published in 1895.

In 1897 the Science Section of the National Education Association appointed a committee of nine to consider physical geography in secondary schools. The report of this committee, made the following year, was in general along the lines laid down by the Geography Conference. It is interesting to note that of the five men who signed the report, three were professors of geology. The report states that "the subject should be carefully held to the leading idea of the physical environment of man." The committee favored elective courses in geology and meteorology.

There has been marked advance in the subject of physical geography during the past sixteen years. We have now more than one-half dozen good texts, and as many laboratory manuals. Our equipment has been improved, and teachers are receiving special training along this line in our normal schools, colleges, and universities.

In spite of this great advance, there has been for several years a growing dissatisfaction with the course as at present organized. It is becoming increasingly evident that it does not meet existing needs. The appointment by the Science Section of the National Education Association in July, 1908, of a committee to report upon the essentials of a course in geography for

secondary schools is but one expression of this lack of satisfaction with present conditions. The Association of American Geographers, at its meeting held in Baltimore a few months ago, appointed a committee for the same purpose, while a large number of articles dealing with the question have appeared in the *Journal of Geography* during the past two years. While the decided advance which secondary-school geography has made is recognized by all, the feeling is general among teachers of the subject and school authorities that the results are far from satisfactory. The next step in the evolution of the subject, a step to be taken in the near future, will be of greater importance than that inaugurated sixteen years ago.

Altho the economic and commercial phases of geography are receiving an increasing amount of attention, secondary-school geography is today practically physiography. Therefore, unless otherwise specified, all references here made to geography, as now taught in the high schools, have to do with this division of the subject. The following are the more important reasons for considering a change in the nature of the course imperative:

1. The course, as at present organized, places too much emphasis upon the detailed study and classification of land forms, and too little upon human response to those forms. The amount of space devoted to the lands by the various physical geographies varies from 40 per cent. to 76 per cent. of the total. The criticism here made, however, is not that too much space is devoted to the lands, as one of the four great divisions of physical geography, but that the lands are not sufficiently studied from the geographic point of view—namely, the human.

2. A concrete study of human response to its environment does not receive sufficient attention. This point has reference to all of the divisions of the subject. Your committee recognize the fact that a comprehensive study of this subject, as applied to large areas, is impossible in a brief course devoted to physical geography. The omission of such study from secondary-school geography is a serious matter, however. A careful examination of our texts will show that the facts and principles stated are given scant application to concrete areas. The newer books show an improvement over the old ones in this respect.

3. The course aims to fit the student for college rather than for the affairs of life. Secondary-school geography, as a part of our educational scheme, should agree with the latter in so far as general function is concerned. In other words, it should aim to render the greatest possible service in preparing the student to meet successfully the opportunities and obligations of life. The fulfilling of college-entrance requirements—a matter which now receives serious attention—should receive practically no consideration. The soundness of this statement becomes evident when it is remembered that only about 10 per cent. of the total enrolment in public and private high schools graduate. In other words, practically *all* graduates of secondary schools enter at once upon some business, some profession, or the duties of home life. It is to

these students—more than 90 per cent. of the total number—that the secondary school should devote itself heart and soul. The popular, but false, conception that the high school should place great emphasis upon meeting college-entrance requirements in geography, as well as in other subjects, is responsible for certain conditions in the curricula of our secondary schools that are much to be regretted.

4. Secondary-school geography does not give the student a grasp of the natural resources, the industries, and the commerce of the world. This condition is, of course, inevitable so long as the geography in the secondary school is almost exclusively physical geography. The training which this phase of the subject, when properly presented, affords is too valuable to be neglected. Especially is this true as applied to our own country.

5. Geography in the secondary school does very little as a preparation for the teaching of that phase of the subject which, in the elementary school, receives chief attention. Your committee recognize the fact that it is not the special function of the high school to prepare its students for any particular occupation or profession. But as the training of children is the most important work in which anyone can engage, most important both from the standpoint of the home and the nation; and as a considerable number of teachers is yearly drawn from the ranks of high-school graduates, we conceive it to be a part of the function of the high school, until such time as professional training for the work of teaching is universally required, to give its graduates such work as will best fit them for teaching, provided that it is at the same time of great value to the many who will not teach.

We do not imply that a good course in physical geography does nothing toward preparing the graduate of the secondary school to teach in the grades, but it omits those phases of the work essential in the elementary school, and which are at the same time of most importance to the average member of society.

6. Secondary-school geography, as at present constituted, cannot give the student that knowledge of the regions and peoples of the world which intelligent participation in the affairs of life requires. If broadly interpreted, this encompasses all of its weaknesses. By its very nature high-school geography places a handicap upon the student who tries to do advanced work in the subject. The lack of a knowledge of place relations, and of regional geography in a broad sense, is a weakness so universally shown by students in the entering classes of both normal schools and colleges, as almost to discourage teachers of geography in those institutions. It is this knowledge which the average person, no matter in what walk of life, most needs. The farmer, the fruit-grower, the stockman, the miner, the promoter of railroads or waterways, the manufacturer, the shipper, the fisherman, the artisan, the health-seeker, and the traveler, all feel its need daily. We cannot read with intelligence the daily papers and the periodicals, not to mention history and literature, without some considerable knowledge of regional geography.

We present the following as essentials of a course in geography for secondary schools:

1. Those parts of mathematical geography which show most clearly how human life is influenced by the relations between the earth and other members of the solar system. Such points as the arrangement of the mathematical and heat zones and the varying boundaries of the latter; the change of seasons; latitude and longitude; standard time and the international date line are important. Facts as to the size of the members of the solar system, their distances from the earth or sun, and their periods of rotation and revolution are not considered essentials.

2. First in importance among the factors influencing life is climate. Therefore, atmospheric phenomena should receive careful attention. The principles should be applied as fully as time and the ability of the students permit. The topics which should receive chief attention are the following: (a) The conditions determining the temperature, pressure, and humidity of the atmosphere; (b) the great atmospheric movements; (c) storms, especially temperate-latitude cyclones, studied by means of the weather maps, and their relations to crops, floods, and transportation; (d) precipitation; its causes and distribution; and its influence upon occupations and habits of life generally; (e) weather changes, such as the effect of unseasonable frosts upon crops, and the efforts of man to prevent the damage; the influence of blizzards upon stock on the western ranges, and telegraph and railroad business in many parts of the country; the effects of storms upon wheat, oats, hay, and other crops; (f) we urge the importance of a study of the work of the Weather Bureau, having students present specific illustrations of the value of its work. Comparatively few realize the multitude of human interests that are advanced thru the operations of this Bureau.

3. A brief study of the ocean as a modifier of climate, as an agent in the destruction and construction of land forms, as the source of certain commodities, and as a medium for the transmission of the commerce of the world. A detailed study of ocean depths, of temperatures at various levels, of tides, and of the character and distribution of ocean life may well be omitted.

While our texts treat the ocean as a separate division of physical geography, we favor an incidental treatment, with a brief summary. The influence of the ocean upon climate—the topic of chief importance—should be considered in connection with the study of climate. Erosion and sedimentation along shore-lines should be treated under those topics. The commodities obtained from the ocean, as well as the commerce which it bears, would naturally receive attention as a part of commercial geography.

4. The larger geographic forms such as plains, plateaus, mountains, valleys, rivers, falls, lakes, and glaciers should receive careful study. Human interests and activities are largely confined to the lands, but it is obviously of far greater importance that we should understand our relations to geographic

forms than that we should have a thoro knowledge of their evolution, or be able accurately to classify them.

Graduates of secondary schools should know the location of the great plains of the world, and how they are related to the production of food, of occupations, of transportation, and the distribution of population. Whether or not these students can name the six or eight classes of plains given in our textbooks is a matter of very little importance. Students should understand how certain definite mountains influence climate, the distribution of plant life, human occupation of their areas, the construction of railroads, the use of streams for transportation, and the development of water and electric power, how they served as national boundaries and have helped to mold national characteristics. The ability to name the different types of mountains, and to classify faults and folds is of little value to the average person, however. In other words, it is the human point of view that is important as applied to every topic.

Students should be encouraged to discover human response to its environment in the home area, as this gives reality to the subject and prepares them to work out and appreciate these relations in remote areas.

The amount of emphasis placed upon the study of the various geographic forms and processes will depend, in part, upon the location of the individual school. A school situated in a mountainous region would very properly devote more time to the consideration of the influence of mountains upon life than would one in the prairie section. In the first-named area the relation which mountains bear to climate, industries, settlement, road-building, are relatively of greater importance than in the second, because they are at hand and are therefore more meaningful.

5. A study of the larger features of the resources of our country such as its soils, waterways, water powers, forests, and mineral wealth. These features of our geographic environment are so vitally connected with the daily life of every individual, as well as with our national progress, that ignorance of them is a serious matter.

This study should show the distribution of the resources, their accessibility, their relation to road-building, to distribution of population, to development of industries, to location and growth of cities, to commerce, and to social conditions. The work of our government in modifying geographic environment should receive careful consideration. Our government is expending vast sums of money in carrying on soil surveys, in improving plants and animals, in reclaiming desert and swamp lands, in the preservation and extension of forests, in developing waterways and harbors. These are subjects upon which every man and woman should be informed from the geographic point of view. The value of such work in the molding of useful members of society is certainly very great.

6. A knowledge of the general geography of the most important countries and peoples of the world. The grasp of regional geography obtained in the

elementary school is necessarily very meager. Geography is quite generally discontinued in the seventh grade, and, as has been stated, practically no attention is given to regional geography in the high school. A knowledge of the geography of our own country and of Europe is a much-to-be-desired factor in good citizenship. A somewhat detailed study of these two regions would incidentally put the student in possession of considerable knowledge of the other continents. In addition to this he would gain a "geographic consciousness" that would be of great value.

If it be true that a large part of the education of the average individual comes thru reading, then it is of the utmost importance that we should be able to read intelligently. This, in the fullest sense, is impossible unless one's knowledge of geography is wider than that offered by the present high-school course in this subject.

7. Some conception of how the history of nations has been shaped by geographic conditions. We do not forget that this should be a vital part of all courses in history, but it should also receive very definite attention in secondary-school geography. All nations afford illustrations of this, some more than others. That our own country is a fruitful field is evidenced by such works as Brigham's *Geographic Influences in American History*, and Miss Semple's *American History and Its Geographic Conditions*.

8. The ability to trace, in the large, the relationships between the most important geographic forms and geographic processes, and to appreciate the responses which human life everywhere makes to its physical surroundings. Only as the student has observed the results of geographic processes on a small scale can he have any definite conception of the evolution of larger and distant geographic forms. When the student appreciates the significance of human response in the vicinity of his home, he has laid the foundations for the discovery and interpretation of this response in remote areas. Moreover, this training will furnish some basis for seeing in advance the general trend of the geographic development of a new region.

In order to make it possible to present the essentials as herein outlined, your committee make the following recommendations:

1. Geography, touching as it does the daily life of every individual at so many points, should be, in some form, a required subject in all secondary schools. Sixteen years ago the Committee of Ten recommended that physical geography be required in all high-school courses. While we recognize the importance of physical geography, we feel that this is too restricted a view, and that, as already pointed out, it does not include those phases of geography which are of greatest value to the average individual.

2. The subject should be pursued for not less than one year. While more than one year is very desirable, we feel that, thru careful selection of topics and the elimination of unimportant details, very much can be accomplished in the time stated.

3. The subject should be presented during the first year of the high-school course.

Such an arrangement will connect the work with that of the elementary school with the least possible break in time. It will also help the student in such work as he may take in history, literature, economics, geology, and meteorology. A third advantage is that it will reach a larger number of students than it will if presented later in the course.

4. There should be at least five recitation periods per week.

5. About one-fourth of the total time should be devoted to laboratory and field work. This should by no means be confined to the study of physical geography. More laboratory work and some excursions should be undertaken in connection with the commercial phase of the subject, and there should be carefully planned exercises based upon maps and models.

6. We recommend that about one-half year be devoted to the larger topics in physical geography, with the human side made more prominent than at present, and that the remainder of the year be given to a study of North America and Europe. Such a course would give our students some considerable knowledge of the geography of the most important countries of the world, and incidentally much useful information, as applied to other areas, would be acquired.

The chief difficulties that stand in the way of putting such a course into operation are two: first, time-honored custom; second, the lack of textbooks that meet the requirements. We believe that careful consideration of the subject from all points of view will remove the first, while the publishers will provide us with the necessary texts almost as soon as we declare ourselves ready for them. In the meantime, the first part of the course can be carried on by means of selected portions of our physical and commercial geographies, numerous government publications, and periodical literature. In the study of North America, the *International*, Russel's *North America*, *The Lakes of North America*, *The Rivers of North America*, *The Glaciers of North America*, and *The Volcanoes of North America*, Brigham's *Geographic Influences in American History*, Miss Semple's *American History and Its Geographic Conditions*, and numerous government publications are available. Helpful material for the study of Europe is to be found in the *International*, *Britain and the British Seas* by Mackinder, *Central Europe* by Partsch, Hettner's *Länderkunde*, Vol. I, "Europe," and government publications.

The work of your committee has been carried on under great difficulties. Its members live in widely separated parts of our country and hence there has been no opportunity for conference. While we are not unanimously agreed upon every point herein mentioned, we find ourselves in hearty agreement on the report as a whole. If the conclusions here reached are pointed in the right direction, and shall help to bring about a more fruitful study of one of the

most practical as well as one of the most broadening and humanizing of subjects, we shall be well repaid.

JAMES F. CHAMBERLAIN, Los Angeles, Cal., *Chairman*

W. L. W. FIELD, Milton, Mass.

MRS. MARTHA KRUG GENTHE, Hartford, Conn.

MARK JEFFERSON, Ypsilanti, Mich.

WM. C. MOORE, South Hadley, Mass.

WM. H. SNYDER, Hollywood, Cal.

R. H. WHITBECK, Trenton, N. J.

DEPARTMENT OF SCHOOL ADMINISTRATION

SECRETARY'S MINUTES

OFFICERS

President—FRANCIS H. HASEROT, president, School Board, Cleveland, Ohio.

Vice-President—OTTO C. SCHNEIDER, ex-president, Board of Education, Chicago, Ill.

Secretary—WILLIAM GEORGE BRUCE, editor, *American School Board Journal*, Milwaukee, Wis.

FIRST SESSION—TUESDAY MORNING, JULY 6, 1909

The first meeting was called to order at 9:30 o'clock at the Auditorium of the East Side High School by President Francis H. Haserot.

Lloyd E. Wolfe, principal of the Vocational School for Boys, San Antonio, Tex., read a paper on "Progress in School Administration."

He was followed by Charles F. Perry, principal of the School of Trades, Milwaukee, Wis., who read a paper on "Trade Schools and School Boards."

The speaker then was subjected to a series of questions which related to the exact status of the trade school in the common-school system and to the details of management, the kinds of trades taught, and the attitude of the trades unions.

Upon motion the chair appointed the following Committee on Nominations:

J. A. Shawan, Columbus, Ohio

C. G. Pearse, Milwaukee, Wis.

F. D. Tharpe, Kansas City, Mo.

The department then adjourned.

SECOND SESSION.—WEDNESDAY MORNING, JULY 7, 1909

The second session was opened at 9:30 o'clock by President Haserot.

A paper on "The New Function of School Boards" by C. W. Mark, ex-president of School Board, San Francisco, Cal., was read by Cree T. Work, president of the College of Industrial Arts, Denton, Tex.

In the absence of the other speakers, the balance of the time was occupied in a discussion of the paper.

The following resolution was introduced by President Haserot:

To the end that a better type of men may be attracted to the service of the schools, be it

Resolved, That the selection and tenure of office of custodians and janitors of school buildings be placed under well-regulated civil-service rules.

The resolution was unanimously adopted.

The committee on Nominations then reported the following list of officers for the ensuing year:

For *President*—J. J. Stoddart, president, Board of Education, Columbus, Ohio.

For *Vice-President*—J. S. Bowers, president, Board of Education, Moberly, Mo.

For *Secretary*—William George Bruce, editor, *American School Board Journal*, Milwaukee, Wis.

The report was unanimously adopted and the officers declared elected.

Adjournment followed.

WILLIAM GEORGE BRUCE, *Secretary*

PAPERS AND DISCUSSIONS

PROGRESS IN SCHOOL ADMINISTRATION

L. E. WOLFE, PRINCIPAL OF VOCATIONAL SCHOOL FOR BOYS
SAN ANTONIO, TEX.

Social service being the supreme end of all school administration, our problem is, What agencies and methods will result in a maximum of social service in the field of school administration? The fundamental requisites on the part of the school board and the community are social intelligence and social honesty.

First, then, as to social intelligence—that is, the ability to discern what is educationally best for that wonderfully complex entity we call society. To discern what is educationally best for one class of society is a very different thing from discerning what is best for the respective classes of society, or for society as a whole. To do this requires clear ideas on education, sociology, and ethics. It calls for a knowledge not only as to what education is most valuable, but as to what educative material and methods will develop the natural abilities of each class into a maximum of social efficiency.

Proficiency and honesty.—The interests of the boys destined for industrial pursuits must be as diligently sought as those of the boys destined for the learned professions. Board members should be informed as to modern methods of building construction, heating, lighting, ventilation, dust-destruction, etc. The health of the children must be looked after and, where possible, provision made for exceptional children.

Second, as to social honesty. In the evolution of ethical ideas, social honesty is reached much later than individual honesty. I have often found that a man who is thoroly honest and reliable in his business relations, does not scruple, as a member of a board of education, to extend favors to friends and to punish enemies. He does not seem to understand that if the service that results from extending favoritism is worth a thousand dollars less than that secured by an application of the merit system, it is as bad morally as if he had directly embezzled a thousand dollars of the school's funds. Besides, in the case of direct embezzlement the law with its penalty is a strong moral quickener. In the case of the indirect embezzlement the board member can fall back upon the right to the exercise of individual judgment in administrative acts. This question of the right to the exercise of individual judgment brings up the related question of the value of expert opinion and of expert services. There is a readier recognition, on the part of the members of the board, of the value of expert opinion in business matters than in educational. Board members are often inclined to resent the intrusting of the initiative in the appointment and promotion of teachers to the superintendent of schools and his assistants. A member may honestly believe that his judgment as to the fitness of a teacher is as good as that of the superintendent. If his friends

are importuning him in the interest of teacher applicants, it is all the easier to persuade himself that his own judgment is reliable.

Division of duties and responsibilities.—This brings us to the necessity for expert opinion and services and definite individual responsibility. There can be no question that efficiency in school administration is greatly promoted by holding the superintendent of schools definitely and personally responsible for the educational side of the schools, and a superintendent of buildings and supplies responsible for the business side—all acts subject to the approval of the board. However, such division of labor does not obviate the necessity for frequent co-operative conferences between the heads of the business and educational departments. Nor is there any question that efficiency is promoted by the selection of board members at large. A ward board member is often imbued with too much local patriotism for the good of the school. In his enthusiasm to look after the interests of his ward, he often loses sight of the highest interests of the schools as a whole. The election of these members by the qualified voters on a general ticket is better than appointment by either the mayor or council, or both. The election of board members directly by the people tends to divorce the school from city politics, and more definitely fixes responsibilities. In the interest of more definite responsibility the small board is better than the large one, likewise a rather long term than a short one.

But even with small, non-partisan, or bi-partisan boards, there is still much opportunity for such bartering between the superintendent and individual members of the board as is not for the best interests of the schools. For instance, when the superintendent, in open board meeting, makes a nomination for appointment, promotion, or increase of salary, it is often impossible for the board to know whether his nomination represents his best judgment or whether his main purpose is to please an individual member of the board or some friend of this member or of the superintendent. A subsequent nomination may please another member or friend, and so on thru the list. The people, witnessing the great harmony existing between the superintendent and his board, decide that their schools must be in a flourishing condition, while in fact their very life is being sapped thru the acts of a cowardly, self-seeking superintendent. Of course, the more thoroly appointments, promotions, and increase of salaries can be hedged about by civil-service rules, the less opportunity there is for such bartering.

Demagog or patriot.—But back of all boards, whether large or small, appointive or elective, are the people—the people, ready to be led by demagog or patriot. But as the demagog has a personal interest in leading, he frequently does it. It is this alternative leadership of demagog and patriot that gives us alternate progress and backsets in school administration. Certain it is that no superintendent or board can long keep far in advance of the people. One of the most pitiable and discouraging things in educational work is to see unselfish, devoted superintendents and board members go down before the

misrepresentations of the self-seeker and demagog. All this is made possible thru the indifference of the people caused by their lack of social intelligence.

So, in the final analysis, progress in school administration is conditioned upon the social intelligence and social honesty of the people. For this reason, every effort should be put forth, thru newspaper discussion, educational lectures, mothers' clubs, etc., to educate the people. This is no easy task because of the inordinate appetite among the masses for the sensational. But notwithstanding many backsets, there is little doubt that substantial progress is being made in many quarters along the lines named: Smaller boards chosen for longer terms; measurable independence of city politics; greater social intelligence and social honesty; widening and diversifying of educational instrumentalities, so as to do justice to all.

Modern tendencies.—Thus far in my discussion I have dealt with general principles and tendencies without giving examples. Without a full knowledge of recent school administration in this country, one hesitates to give examples for fear of marring the historical perspective. Immediately upon my acceptance of a place on this program, very late in the year, I wrote one hundred city superintendents for recent facts in school administration and their opinion on general tendencies in school administration. This communication being sent at a time when the superintendent's office force were busy with the work incident to the close of school, it elicited a limited number of replies. Permit me to suggest that, early in the fall, someone be requested to get the recent important facts of school administration in the United States, and report upon them at your next annual meeting.

I now, however, proceed to give a few representative facts. Among the great movements in the interest of the defective, backward, and otherwise handicapped classes, are those in New York, St. Paul, Des Moines, Cincinnati, Milwaukee, and Toledo. Medical inspection is becoming general in the cities of the United States. In Toledo indigent pupils under the compulsory age limit receive two dollars for each week's attendance at school, to enable them to remain in school. By recent law in Wisconsin, cities establishing day schools for deaf and blind pupils receive \$150 per year for each deaf child in average daily attendance, and \$200 per year for each blind child in average daily attendance.

Among the movements during the last few years for smaller boards with more definite responsibilities are those of San Francisco, Philadelphia, Milwaukee, and the state of Ohio. Among the cities that are magnifying the work and responsibility of the principal are Salt Lake City, and Newark, N. J. The Memphis, Tenn., School Board has recently passed a resolution paying regular teachers twelve months in the year. Superintendent McNeill states that as a result of this, more than half of the white teachers will go off to the summer schools. In 1907 St. Paul, Minn., established an evening college for St. Paul teachers. In trade schools, the states of New York and Massachusetts have taken very important legislative steps, and practically all cities

of this country are moving forward in industrial work for both boys and girls.

The bane of compromise.—Many times have I felt that there is material for a good novel or drama on "The Tragedies and Wicked Compromises in School Administration"—the tragedies of the devoted, courageous superintendent who year by year takes his professional life in his hands and battles for the highest interests of all his pupils; likewise, the tragedies of the unselfish, public-spirited member of the board who goes down before the brutal, selfish majority of his board; and, what is worse, goes down before the duped people whom he seeks to serve.

On the other hand, are the wicked and disgraceful compromises on the part of the superintendents and board members; compromises, not often of such a violent and high-handed nature as to arouse public sentiment and goad it into revenge; but scores of adroitly managed compromises, in the employment and promotion of teachers, the erection of buildings, and the making of repairs—compromises that do not tend to disturb the public, but, nevertheless, seriously militate against a higher order of school efficiency. It must be admitted that much of this quiet bartering of the children's interest for a mess of pottage is not recognized by the school-board member as dishonest. He has been accustomed to extend and receive courtesies in business, in politics, and in the professions, and has not reached that plane of social intelligence and social honesty that tells him he is doing wrong; that he is the people's and children's agent, and that anything less than his most intelligent and devoted service robs the people and the children. But a lack of intelligence and of a quickened conscience only partially excuses him. No man has a right to accept a public trust without a good measure of social intelligence and social honesty.

But compromises on the part of the superintendent are less excusable. He is devoting his life to the highest order of public service and ought not to be lacking in either social intelligence or social honesty. He therefore "sins against light and knowledge," and does it for want of courage. His excuse is the humiliation and financial embarrassment that would result from defeat at the hands of the board. But the public does not excuse the soldier-coward who deserts for fear of the enemy's bullets.

TRADE SCHOOLS AND SCHOOL BOARDS

CHARLES F. PERRY, SUPERVISOR OF MANUAL AND INDUSTRIAL TRAINING
PUBLIC SCHOOLS, MILWAUKEE, WIS.

All vital policies which confront the boards of education of our towns and cities are settled by those bodies feeling the pulse of their respective communities. A new problem is arising which will tax the best effort of school boards all over the country. It is the question of sending out the youth of our land from our public schools better prepared to enter the ranks of earners.

This involves something which will help our boys and girls to find themselves and to supply vocational instruction. It also means a critical examination of all the studies offered in our public schools and a thoro adjustment of them where necessary.

By "trade school" is meant exactly what the name implies, a school where a thoro apprenticeship in a trade may be served; and by trade is meant "a skilled or specialized handicraft; the occupation of an artisan."

Part of the problem to awaken public opinion in favor of industrial education in this country is to convince many that a thoro apprenticeship can be served in a place other than a commercial shop. Thoro apprenticeships have been mastered in trade schools in Germany for thirty years. The Williamson School of Mechanical Trades in Delaware County, Pa., has been sending out splendidly equipped graduate apprentices in various trades for sixteen years. This school is a private institution. The Milwaukee School of Trades, which is an integral part of the public-school system of that city, is today graduating thoroly prepared apprentices in various trades. This statement will be met by different people in different ways. The majority will express different forms of doubt. When any school board contemplates the establishment of vocational training in its public instructional system and any doubt is expressed as to the method of procedure, it may rest assured that it could spend money in no more economical way than to investigate, by personal inspection, as many trade schools as possible.

It can be plainly shown, to anyone who cares to look into the matter *and who can appreciate the entire premises*, that the trade-school graduate who begins his apprenticeship at sixteen can by twenty years of age be made better fitted in every way to meet life than the commercial apprentice who began at sixteen, not only because he has been taught the "how" side of his trade, but the "why" side as well.

The right vocational institution will by no means teach shopwork only. It will teach him mechanical drawing and workshop mathematics. It will take him on shop-inspection trips and make him prepare written reports on these trips. It will give him lectures on topics pertaining to his trade and trades allied to his. It will suggest to him correlated reading. Our country is awakening to the value of night schools of both grammar and high-school grades. Trade papers and journals are giving us what the hungry workman wants and in a form that he can readily grasp. Correspondence schools help many, and, now, last and best of all, for those whose academic school days are ended, we are having university extension brought to our homes and supplemented by the personal instructor. The University of Wisconsin is doing this for the people of its state, and what Wisconsin can do, others may do.

Now that the problem of vocational training is slowly assuming a concrete form in this country, there will be found to be two main methods of approach to it: First, thru the avenue of the commercially disinterested trade school which takes a boy at sixteen, teaches him thoroly the essentials of his trade

and sends him out in a minimum period of time, with a preparation at least equal to that which he could receive in the best commercial shop along his chosen line in four years—and this done by public taxation; or, second, by what is called the co-operative or partial-time plan which proposes that the boy shall spend the working hours of each day, after reaching a certain age, part of his time in school and the remainder of his time in some shop. It is proposed to include this plan in the public-school system of any city which will adopt it. Any practical plan which will add to the number of efficient workers of this country will be welcomed. It is safe to assert that no plan can be invented which will be faultless, or which will be free from criticism. Of the two plans mentioned, the objection to the complete and thoro municipal trade school is its cost to the taxpayer, while the objections to the co-operative plan are many. There is no positive assurance of the continued co-operation of the employers, especially in times of industrial depression. Its scope is limited by the kind and quality of work done in the community. It depends upon the desire of the boy to continue upon a half-time system for four or five years. It does not provide for the opportunity of mature persons who desire to perfect themselves in the practice of their trade or some other trade in night classes.

The co-operative system can be used to better advantage in connection with an engineering school of higher learning which has no shops in its equipment and which is fortunate enough to be placed in a machine-tool city, than to apply it to the public-school system which touches our boys and girls of grammar and high-school age. The rich success of the University of Cincinnati, with its co-operative plan for students of college grade, can be duplicated in any machine-tool city like itself, such as Worcester, Mass., for instance; but it would be useless to Cornell University, placed in Ithaca, N. Y., which is not a manufacturing city. There are, however, some vocations which can be better mastered thru the avenue of the partial-time system than thru the complete public trade school, and they belong to the class which partake more of a business quality than those which require skill and training of hand. This phase of handling our problem of industrial education will need deep study and foresight. It resolves itself into the question, shall we substitute something of which we are not sure or cannot control for something else which is positive, quick, and complete because it costs less? The not-far-distant future will bring us data of increasing value along these two and other lines of this vital question.

Under the head of problems incidental to the establishment of industrial education in our public schools the greatest one is not the actual trade teaching—that is the easiest part of it all—but it is what to do with the boy and girl between the age when the law says they may leave school and the age when they may enter upon, most economically to themselves and the municipality, their definite, actual trade apprenticeship. Theoretically here is a sharp line of demarcation, but practically there should be none.

Every American boy and girl should be at least an eighth-grade graduate. Every possible effort to make them such should be made. We shall have far more of them than we have at present when we shall lead them gladly to something higher and make the path upward more profitable and interesting. The influence of the vocational school should be felt indirectly thru the seventh and eighth grades, and directly as soon as a boy or girl graduates from its grammar-school work. This may be done in two ways, depending upon the courses offered in the high schools. If the latter have a manual-training course, then it may be easily adjusted to all the eighth-grade graduates who wish to attend the trade school when they attain the age of sixteen. This course should be outlined in the main by those in charge of the trade-school work and in conjunction with the principals of the high schools. It should contain mechanical and freehand drawing, workshop mathematics, some practical or business English, and considerable shopwork. It should be known as the Trade School Preparatory Course. The day the pupil is sixteen years old he may leave the high school and enter upon his trade apprenticeship proper, and, if he has made no mistake in the choice of his trade, he should finish it at eighteen and be better prepared for an artisan's life than the commercial apprentice at twenty. If for any reason, while taking the trade school preparatory course, the student finds he wishes some other vocation in life, the work done in the preparation for the trade school will count as high-school credit, and no time has been lost. This new plan is to be put into effect in Milwaukee this September.

If the city has no manual training in its high schools, or if all its secondary-school manual-training equipment is in demand, then the influence of the trade school should be felt in a trade-school preparatory course in connection with the regular trade-school building. The majority of boys would prefer to take their preparatory work there. This preparatory course, in either the atmosphere of the high school or trade school, should be made as flexible as possible and equally adaptable to the bright and slow boy.

For the youth who for any reason finds it too difficult to complete the eighth-grade work, it is suggested that each city have as many centers as necessary where especial attention under the best teachers may be given these backward boys and girls who are larger and older than the average eighth-grade graduate, and who keenly feel their inability to keep up with their smaller yet brighter brothers and sisters. This method of caring for our backward boys and girls, and solving the most delicate part of our entire elementary-school problem, is the plan of Superintendent of Public Instruction, Carroll G. Pearse, of Milwaukee. Its excellence lies in holding to the ideal that every American boy and girl should be an eighth-grade graduate. It cannot help but appeal to the parents of such pupils that the school board is awake to its great opportunity and responsibility, and it also removes all possibility of interpretation that a premium is to be placed on pupils not to strive to complete the eighth grade, and that they may go to the trade school as soon as

fourteen no matter where they stand in their grade work. For those who leave school at fourteen without completing the eighth grade and enter the ranks of earners until the age of sixteen and then seek entrance to the trade school, admission should not be denied them. Many of such boys and girls will do all the better work for having been compelled to earn their way for a while.

Another element which enters the problem more deeply than appears on the surface is the keen competition of private business colleges among themselves, and against the excellent commercial courses offered free in the high schools of many of our cities. So keen is this competition for students that addresses of the boys and girls in the eighth grade are paid for in order that the representatives of these private commercial colleges may call upon the parents to bring pressure upon them to send their son or daughter to receive their instruction. Positions are promised to graduates. By this means many of our boys and girls receive a wrong impression of the true value of an artisan's life, simply because a position which permits of white collar and cuffs and clean clothes is made to appeal to them. It is evident that a thoro commercial course, in connection with a four-year high-school schedule, with its thoro drill in literature and composition, will make such a graduate of more intrinsic help to the employer than a hastily crowded course of a year or so in a business college. This does not imply that there are not some good, private business colleges and that they have their place, but school boards should know their methods of procedure and take steps to meet their competition.

Another important point which should be clearly understood by school boards is the function of manual training in our public instructional system. In its place manual training can be made as valuable as any subject in the public-school curriculum, but it has been injured as much by its friends as by its enemies. Too much has been claimed for and too much expected from it. Already some educators and some members of school boards, fearing the cost of vocational training, are asking why it cannot be extended to include trade training. Such questions and claims simply typify the wrong light in which manual training is held in this country. Briefly, manual training cannot assume to supply the new demand upon our public-school system for vocational training, because, first, unless the manual-training instructor is already master of the trade, the fundamentals of which he is teaching, he or she has no right to teach it as a trade; second, since the complaint is strongly made today regarding our eighth-grade graduates that too many of them are irresponsible youngsters who cannot figure accurately or write English properly, it is evident that much more time cannot be taken from grade work for manual training. This is not decrying manual training any more than decrying the high schools for not teaching analytical geometry and calculus.

It will be found the cause of vocational training will be more speedily hastened and perfected by each city's establishing, as soon as possible, its own trade school, no matter on how humble a scale it may be, as long as it

does a class of work which will appeal to boys and girls, parents and employers, rather than to struggle along attempting to establish a preparatory department for something which is not yet born, let alone developed. America today is suffering under such a tremendous handicap, industrially speaking, and from so deep a lethargy on the part of our boys and girls and their parents regarding the following of skilled trades as a means of livelihood, that any solution which does not appeal in a tangible way to youth and parent, will, if it does not altogether fail, at least delay the remedy until America will be out-distanced, as a producer of output requiring skilled hands, by more than one smaller nation.

Finally, in order to hasten the establishment of this new work in our schools, public attention must be challenged. The trade schools of Germany and thruout Europe are held up as examples to follow. We may appoint a commission to go to Germany and gather the cream of her experience of thirty years of public-school vocational teaching. The commission may return with her identical curriculum; it may even bring her machinery and tools and teachers, but whatever it may gather and bring, the most vital and necessary thing—Germany's public opinion toward trade teaching—must be left behind. We must develop our own just as she did. We must bear in mind, too, that the youths in the trade schools in Germany today are the children of parents who themselves have the trade school to thank for their skill. Another important point: Germany did not start her trade schools in the face of such keen, industrial competition or specialized manufacture as we must meet today.

The city which has a trade school in its public instructional system will cause all its boys, ere they reach fourteen, to visit it in company with their principal. There they will see boys but a little older than themselves doing high-grade work. While there they will have impressed upon them the fact that they must leave their grammar-grade work soon. Since they must all make some choice in a few months, it is vitally important that they be informed of the heritage which is theirs. They are reminded that it makes little difference what one chooses for his life work, providing he chooses the thing which he feels born to do, and that *something requires study and training to reach its highest plane*. Care must be taken to lay no especial stress upon any special vocation, the point being *that the boy try to find himself*. Before he leaves the trade school he is handed an illustrated catalog prepared by the school board and urged to share it with his parents and an invitation sent to them to visit the trade school during its evening classes. Thus the parents, also, are reached. Next, the superintendent of instruction will see that all the teachers in the public schools are intimately acquainted with its work, and the school board will take measures to inform the employers of skilled labor of the character of its work. This is part of the policy followed in Milwaukee.

Instruction in public schools is free in most states until twenty years of age. Thus it is possible for a boy, if he desires and has the ability, to complete his high-school course by eighteen, and still have two years left in which to

take his complete trade-school course free. Not until we have the best possible vitalized elementary courses, taught by properly trained teachers, who have had impressed upon them the important truth that they form a unit in an unbroken whole which leads from kindergarten to either vocational, business, or professional life, will we be able to expect or have any right to expect to hold our boys and girls longer than we do. Nor will it be sufficient to have all this alone. In a careful way our children must be led to know what a wonderful birthright is theirs.

There is no part of the public instructional system which will bring to the student, the taxpayer, and the employer such quick, lasting, and satisfactory results as the outlay of effort and money for industrial education. It will be expensive, but when it is well established thruout our land, less taxes will be necessary to pay for the negative things in our midst.

America is awakening today to the truth of Lowell's words:

No man is born into the world whose work
Is not born with him. There is always work
And tools to work withal, for those who will,
And blessed are the horny hands of toil.

THE FUNCTION OF SCHOOL BOARDS

CECIL W. MARK, EX-PRESIDENT, BOARD OF EDUCATION,
SAN FRANCISCO, CAL.

It is my desire that this somewhat disconnected paper be more of a discussion of the general subject than a formal presentation.

In our form of government it is a safe conclusion to draw that all functions of school boards must not be too far removed from the people. In other words, boards cannot go too far beyond the general public opinion in their work and general educational progress. This is true in all legislative and administrative functions, for the people are the source of power.

Boards should be simply the representatives of the people in school affairs. In many cities and communities the boards mix in all the petty politics, such as trading teachers, janitorial, and other positions for favors in other departments of the local government. This is one of the greatest evils today in school administration. Also, contracts are awarded, architects are favored, inferior supplies are purchased; in fact, many more serious things are done to curry favor with some political or personal friend. This bartering in school affairs is absolutely criminal, and can only be stopped by wise and judicious legislation. Even this cannot be accomplished unless the personnel of the school boards all over our country be raised to a higher standard. Many seek position on the school board not for the good they can do their community but for their own personal advantage. Professional men, all kinds of contractors and mechanics, seek such places for prestige, power, and prominence, thinking that by so doing, business will come their way.

School boards have many old functions which should be eradicated and

many new ones, which, introduced, would greatly improve our school conditions. Would it not be possible for some commission, with power to act, to formulate a working plan for all city school boards? Conditions differ in various sections of our country, hence nationalization would not produce the best system. This might be done without nationalizing our school system.

Our people all believe in local school administration, and we can never hope to have a uniform educational plan for our whole country; but certain basic functions could be laid down for all school boards to follow. It might be well to present a few thoughts which may be new, or may be old in some places, but which the great majority of cities do not follow.

Given an ideal school board in a fairly ideal community, I would favor no legislation whatever, but would give it absolute control. Let the board, as occasion arises, act as it sees fit but always keep in mind the highest welfare of the children of the locality. Many advantages to children have been lost on account of restrictive legislation.

Not being able to find in our country ideal conditions, but facing problems as they exist, we must restrict by wise directive legislation. Wherever power is given let it be very definite, so there can be no shirking of responsibility; wherever duties are to be performed let them be centralized and located at once; no passing of responsibility, no shifting of duties, and no weak and indecisive actions permitted.

First.—The first and most important function is the selection of the administrator, or the superintendent of schools. The board should by *law* be given full power to select its executive head, not for a limited number of years, as is the prevailing custom, but during good and efficient service. His power should be defined by law and not delegated to him by the school authorities. This delegation of power simply by rules and regulation of the educational boards has done much mischief and has hindered the school progress of many cities. Experience has taught that delegated power is worthless on account of the whims, the personality, and the changing conditions when men of affairs are associated together. A superintendent, on occasions, simply becomes a tool or is forced to resign. A man loves independence of action, for it broadens his horizon and causes him to arise to his great and noble work. All assistant superintendents should be absolutely selected by the executive head and their powers delegated to them by the appointive power.

Second.—The second function is the selection, during competency, honesty, and tact, of a business manager. In large cities he should be recognized as a man of large affairs with a large salary fixed by law, so no disgruntled member of the board could have him removed or have his salary reduced for not "standing in line." In large cities the duties and responsibilities of the business manager should be fixed by law, but the responsibility of all his transactions should finally rest with the school board.

Third.—Next to the importance of the selection of the superintendent is the selection of teachers.

This function should not rest with the school board but with the superintendent. Many places try this in a half-hearted way by requiring the board to approve his selections. This I do not favor, but, by law, would give the executive head this power of selection and hold him directly responsible.

A plan should be adopted by city charter, or legislative enactment—as near an ideal system as could be devised—governing and controlling the superintendent as to the manner in which he selects his teachers. It is to be assumed that he must faithfully and honestly carry out the plan with high ideals and noble purpose. What a great work for him to perform! What a sacred duty is his! He must arise to this great responsibility or vacate his office.

It is not for this paper to discuss any plan for selection of teachers as this function does not, in my opinion, belong to the scope of this theme.

Fourth.—Nothing will do more harm to the teaching force, nothing will destroy honest effort, efficiency, and noble endeavor more than the promotion of the unworthy over the fairly competent and average teacher. This function of promotion which is now entirely in the hands of the board and which has worked such havoc in many communities of our country should be taken away. Just to whom this should be given, just how it should be done, is a very serious problem and one in which I hesitate to offer any suggestion.

In order to be consistent in this discussion this most important work should be given to the superintendent. A plan should be worked out after consulting with some of the principals having high ideals. The scheme could then be adopted by the board and, after trial and experience, enacted in a law or the city charter, so that no subsequent board could radically change the system. Teachers all like fair play, and when they realize that hard work, honest effort, and conscientious duty will find reward, then will the force look steadily upward and onward. Destroy *unworthy* promotions in a school system, and you destroy the cancerous growth which is now eating at the vitals of the educational progress of many cities.

Fifth.—Equally important with promotion is the dismissal of teachers. This function should rest entirely with the board, after charges have been filed and presented by the superintendent. No teacher should be dismissed without just cause. In case of retirement with an annuity, the board should have power to retire absolutely, providing the annuity has been fixed by law. All transfers, the changing from grade to grade, should be absolutely left with the superintendent. The approval of the board should not be required.

Sixth.—The awarding of all contracts for current supplies and the erection of buildings should be a function of the school board. In some cities these responsibilities are distributed to their legislative commissions, which is bad, for here again responsibility is divided. In large cities, the business manager should have power to select architects and all assistants, subject to approval by the board. No school building should be finally erected without the approval of the superintendent of schools. The tendency of all boards is to

create many departments, thus increasing the cost of administration and destroying effectiveness.

Seventh.—In recent years, many worthy movements have been carried into effect for the general welfare of the child. For some unaccountable reason, these worthy objects have been taken from the school administration and placed under some high-sounding commission or some new titled office.

It should be the function of school boards to have under their control all playgrounds, so that intelligent direction could lead from the classroom to the playground. Play could be made an important part of our regular school system, but to place grounds under the Park or Playground Commission is absolutely wrong and opposed to all educational progress.

Reform schools of all kinds, dealing with delinquents and defectives, should be placed in the hands of local school boards or under the direction of state boards of education.

The enforcement of compulsory education, even including the juvenile court, should be a function of the board of education. Child-labor is surely an educational matter and should be so considered and placed. In fact, all the things connected with child-life should be correlated and connected together. The people should awaken to their responsibility and take the child and give him a well-directed training under one general management, under one scheme of education, and a well-directed plan looking toward the future welfare of the state and nation.

In conclusion, school boards should be small, and elected (if possible, at a special election). Have few meetings, simply to legislate on important duties. In fact, if a comprehensive scheme based on this discussion were planned, the board would become a legislative body of the municipality. We need reform based on broad and general principles, in order to perfect our city school systems and give to our children what they richly deserve.

LIBRARY DEPARTMENT

SECRETARY'S MINUTES

OFFICERS

President—MISS MARY EILEEN AHERN, editor of *Public Libraries*, Chicago, Ill.

Vice-President—DAVID FELMLEY, president, Illinois State Normal University, Normal, Ill.

Secretary—JOSEPH F. DANIELS, librarian, State Agricultural College, Fort Collins, Colo.

FIRST SESSION.—WEDNESDAY FORENOON, JULY 7, 1909

The department met in the Woman's Club Rooms at 9:30, with Vice-President Felmley in the chair.

The program was opened by Mr. Dudley, of Denver, who gave an account of the American Library Conference at Bretton Woods, N. H. Vice-President Felmley discussed Mr. Dudley's remarks.

Robert J. Aley, state superintendent of instruction, Indianapolis, Ind., presented a paper on the subject, "Books and High-School Pupils." Edwin W. Gaillard, superintendent of the School-Work Department of the New York City Public Library, led the discussion which followed.

The following Committee on Nominations was appointed:

George H. Lee, Denver, Colo.

R. J. Wells, Loveland, Colo.

Miss Mary H. Johnson, Nashville, Tenn.

The following were named as members of a Committee on Resolutions:

Joseph H. Daniels, Fort Collins, Colo.

E. W. Gaillard, New York, N. Y.

Miss Mary E. Ahern, Chicago, Ill.

SECOND SESSION.—THURSDAY FORENOON, JULY 8

The department was called to order at 9:30 o'clock, with Edwin W. Gaillard in the chair.

"The Plan of a Course of Instruction in the Use of Libraries, and the Results Accomplished" was the subject of a paper read by Miss Edith Tobitt, librarian of the Public Library, Omaha, Nebr. The discussion was led by Mr. Parsons, of Denver.

Francis G. Blair, state superintendent of public instruction, Springfield, Ill., read a paper on "The Study and Use of Books." Discussion was opened by J. A. Whiteford, superintendent of schools, St. Joseph, Mo.

Charles E. Chadsey, superintendent of schools, Denver, Colo., read a paper on the subject, "What Does Each, the Library and the Public School, Contribute to the Making of the Educated Man?"

The Nominating Committee submitted the following names as officers for the following year:

For *President*—Edwin W. Gaillard, superintendent of School Department, Public Library, New York, N. Y.

For *Vice-President*—C. E. Chadsey, superintendent of schools, Denver, Colo.

For *Secretary*—Mary Hannah Johnson, librarian, Public Library, Nashville, Tenn.

The report was accepted, and the nominees declared elected.

The department then adjourned.

JOSEPH F. DANIELS, *Secretary*

PAPERS AND DISCUSSIONS

BOOKS AND HIGH-SCHOOL PUPILS

ROBERT J. ALEY, SUPERINTENDENT OF PUBLIC INSTRUCTION OF INDIANA
INDIANAPOLIS, IND.

The schools of America are doing great things for the country. They are indeed its hope. Without the schools the days of the republic would be few and short. The growth and continued beneficence of the government depend in great measure upon the growth and continued improvement of the schools. Whenever the schools get so good that they are above criticism the beginning of the end is in sight. We ought to rejoice that this time is not yet in hailing distance.

The schools have labored hard to equip the youth of the land with what the race by its common consensus of opinion has come to regard as needed information. This has been crystallized into the so-called fundamentals of knowledge. It includes the proverbial *three R's* and in addition some knowledge of the earth as the home of man, and of man's history upon it. In recent years we have added to these things considerable training specifically designed to help the youth in the struggle for bread. Manual training, domestic science, drawing, music, agriculture, and many other subjects of practical value are now included in the curricula of many schools.

A very large number of people are coming into agreement with John Dewey. "The school is not a preparation for life; it is life." In many respects the after-school life should be a continuation of the things begun in school. It is this view that makes *books and their uses* a topic of great significance to teachers. The subject is of real importance to every grade of school from the primary to the university.

The wisdom of the past, the instruction of the present, and the prophecy of the future are all contained in books. If one would prevent present mistakes he must know past failures. If one would build a structure of permanence he must rest it upon the foundations that the past has proven. If he would enjoy the calm and repose that make for power he must find the elements of these qualities in the experiences of the past. If he would have the companionship that is satisfying he must find it in the men who have recorded their thoughts in books.

All these things and more make books one of the great materials of education. In the education of the future books must take a greater part than they have yet assumed. The work of the school must be so adjusted that every pupil will get familiarity with some books and the practical ability to use many books. He who has learned how to use books has in his possession a tool of great power. The use of this tool makes him educated. No school can afford to send boys and girls into the world without this equipment.

The need of books as direct aids in the work of the school increases as the

pupil passes from grade to grade, and becomes greatest in the high school. No really good high school is possible without at least fair library equipment. The use of books in the high school cannot be what it should unless there is progressive training in the use of books thruout the grades. The child that reaches the high school with no training in the use of books of information, except that secured in the preparation of lessons in the adopted texts, is poorly prepared to do even ordinary work. If in addition to this he has not made the acquaintance of a number of good inspirational books, he finds himself unable to get the enjoyment out of life that is his right. This leads us to conclude that the proper use of books by high-school pupils is the result of much well-directed effort thruout the grades. In fact, unless preparation is made in the grades desirable work cannot be done in the high school.

The matter of books for young people and the direction of outside reading in the grades has received much careful attention. Very desirable results have been attained. More than twenty years ago the teachers of Indiana thru their state association organized the Young People's Reading Circle. This has been operated thru the schools and has resulted in many grade schools accumulating good libraries of books for young people.

The directors of this work have always been teachers well fitted for the task and greatly interested in the children. The teachers of the state have taken this matter up with enthusiasm and have helped to make it a success. Books have been selected for all grades from the second to the eighth. The selections have been made with a view of cultivating the reading habit and the taste of the reader, and also for the purpose of helping to broaden the work of the school. The books have been inspirational and informational, with the first more prominent than the second. These lists have included the good stories of the present, biography, history, fairy story, myths, poetry, classics, and science. Every valuable field of literary effort has been touched.

The results of the twenty years' experience are very gratifying. The teachers are enthusiastic in praise of the good things accomplished. Many boys and girls have formed the reading habit and have become regular patrons of the library. In many cases they have begun the collection of books of their own. They have formed discriminating tastes and are no longer in danger of being led astray by vicious and unclean books. They have learned how to use books as helps to the regular school work.

In addition to these very specific results there have been a number of valuable by-products. Many problems in school discipline have been solved in an easy way because of the presence of the reading-circle books. The bad boy often forgets to be bad if he is interested in some splendid book of adventure. The restless boy becomes quiet and the silly girl sane under the magic spell of a good book. Many parents have caught thru these same books their first glimpse of the world of story, and as a result have become patrons of the library and subscribers to good papers and magazines.

Experience has convinced most of us in Indiana that nothing in the way of

library training for the children of the grades is so effective as the reading circle and the schoolroom bookshelf filled with just the things a child loves. Given these conditions plus a teacher who believes in the efficacy of books, and the conditions are favorable to send the child from the grades into the world with good taste, good reading habits, and good character well started, or to send him into the high school with such a background of knowledge of books that he can use most effectively all the opportunities offered him there.

A high school without a library is as impossible as a high school without a laboratory, or a high school without a teacher. As to the size and quality of this library there will be various and varying notions. Certainly it cannot be too large and certainly it may be easily too small. There are some few things concerning this library upon which we may quite fully agree. These will be stated.

First, it should be informational. It should contain the very best dictionaries, encyclopedias, atlases, gazetteers, books of facts, handbooks, indexes, and books of quotations, besides standard reference books and treatises in every subject taught in the high school.

Second, it should be inspirational. It should contain books of poetry, fiction, essay, drama, history, romance, art, travel, and biography.

In both these fields there is no limit. The library should grow. Additions to it should be made frequently and regularly. These additions in part, at least, should be made upon the recommendations of the high-school teachers. It is in this way only that a well-balanced library can be maintained. With all deference to the librarian it is true that he is not omniscient, and therefore he cannot know all the good and needed things in the many fields that must be represented. For the work of the school a library covering all fields of study represented in the curriculum is absolutely essential. Nothing short of this should be tolerated.

The library should be catalogued completely and both library and catalog should be accessible to the student. I am aware that many librarians feel such a personal responsibility in the matter that they are unwilling for large numbers of readers to have access to the shelves. I think, however, that in a high-school library this restriction should be removed and every pupil should have the chance and the invitation to browse among the books. What if a few books are lost! Better lose a hundred or a thousand books a year than to lose that fine appreciation and growth that results from free association with books. Many a boy will read if he can select the book from the shelf who would never make a selection thru the cold cards of a catalog. Selecting books from a catalog is about as satisfactory as selecting clothes or food in that way. Of course some standard things may be obtained, but much of the best will be passed by. One must see and handle if he would make the best book selections.

The high-school library should have as careful direction as any other department of the school. A stock of books, a good catalog, and free access

is not enough. There should be a sympathetic and efficient director in charge. This individual should understand the school situation and be able to work in perfect harmony with the teachers. His rank should be equal to that of a head of a department. He must be a superior man. He must get results without specific assignment or direct recitation. He must be sympathetic and unobtrusive. His work must be quiet and very largely individual. His purpose must be to make the student independent and self-reliant. The high-school student should learn the machinery and the technique of the use of books. He should learn early in his course the standard works of reference and know in what fields of learning each is particularly strong. Incidentally but certainly the librarian should teach the student how to use these books of reference readily and economically. When a new class enters the high school no better service could be given it than a number of lessons in the library upon the use of dictionaries, encyclopedias, and all other books of reference. Early acquaintance with these helps to knowledge is more essential than knowledge of algebraic signs and Latin declensions. Training in the use of these helps should continue thruout the school course, because it is from books that mature men and women must gain their information. The school should give them great facility in using these means of information. All the departments should co-operate in this and frequently make assignments that will require search in reference books. Of course judgment should be used so that work of this sort does not become burdensome. With proper care such work is not only of great value to the student, but it proves to be intensely interesting also. Many teachers have found that by the proper use of the informational part of the library pupils have been retained in school and started on the road to useful lives.

Every high-school course should be planned so that there will be time for reading outside of regular assignments. The pupil should read much for the pure joy of reading. The inspirational side of the library should be used freely. To this part of the library the pupil should be induced to go for joy and recreation. Librarian and teachers should conspire together to entangle him in the lure of literature.

The importance of the proper relation of the high-school pupil and the library is so great that one cannot adequately express it. The nature and joy of the entire mature life is involved in it. Among many people, both young and old, conversation is a lost art—not always lost, for many times it has never been possessed. It is rare indeed that a group of people can spend an evening in conversation and agree that it has been profitable and pleasing. In general such a group vote the evening a failure unless they have spent the time studying the artistic representation of diamonds, hearts, clubs, and spades upon small pieces of pasteboard. The fine art of conversation will not be realized by people generally until the schools succeed in having books yield their treasures to all pupils. This calls for a well-planned conspiracy among teachers, librarians, and school officials. The teachers must study

each pupil and discover an avenue of approach to his interest; the librarians must use the most modern means to display the books and exploit their contents; the school officials must appropriate the money, buy the books, and keep the library up with the times. That such a conspiracy will succeed is an assured fact. Each high-school boy and girl will become a lover of books if the proper opportunity is given. The lover and reader of books always has something to communicate when he is with his fellows. He is on the road that leads to good conversational power.

Many high-school courses would be more effective if some of the pressure were removed from examination courses and in its place encouragement given to reading. One who goes to the library merely to prepare for an examination does not necessarily become a lover of books, nor does he get from them their best message. The whole academic life in America is weakened by the mad desire for credit. Many of our young people are piling up credit instead of culture. They think they are so rushed that they have no time for the finer things. For the relief of this situation the most potent factor yet discovered is the library, not the general circulating library, but the library connected with the school.

Library people everywhere should turn their attention to this fertile field. Teachers and school officials should likewise give it their attention. All those interested in the future of the republic should unite in an effort to bring in the way of the youth of the land books, to make them lovers of books, and to help them to get thru books the culture that the future demands.

PLAN OF A COURSE OF INSTRUCTION IN THE USE OF LIBRARIES, AND THE RESULTS ACCOMPLISHED

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The problem of teaching the public—the real owners—the use of a free library has been considered from almost every point of view. So much has been said and written that there seems to be nothing more to say and yet we are almost as far, in reality, from being the “people’s university” as we were twenty-five years ago. With all the advance that we have made, and with all of the effort that we have put forth, we still reach comparatively few people.

• If the library is to be the “people’s university,” why should not those who have been placed in charge of public libraries use as much effort to make the advantages of that university known to possible students as the people who are at the head of our more specific educational institutions? In order to obtain the desired increase of attendance at the library, the effort should come not only from those directly interested but also from those who are teachers in any line of study.

Too small a proportion of our people know the library, and too large a proportion ignorantly believe that it is only for the use of those who have a love of literature or are doing intensive study of some special subject. There

is also a large and almost hopeless class which believes that the library exists only for the reader of fiction, and for those too poor to buy books or subscribe to magazines.

The first requisite necessary to attain the desired end—to make the library known to the public—is that the librarian be, by nature, a teacher. It would be well if every librarian had had normal-school training and some experience in teaching; but what is even more desirable than either is that she should know she has something to teach, something that is worth teaching to the public, and above all, that she have an enthusiastic desire to teach it to her people.

Much has been said of the value of browsing in a library. We read of unusual children who have access to unusual libraries, and of the wonderful results attained. But these are the exception, not the rule. Exposure to books does not teach their use, particularly their economical use, and the person who would learn to use a library successfully must learn so to follow his train of thought that the subject of the book, and perhaps the book itself, will be suggested to his mind. This is real conservation of energy, and should be so prompted and encouraged by the librarian that in time those users of the library who have not had the advantage of a university education and, perhaps, not a high-school education, will soon be as familiar with the books and the tools useful to them as those who have had this training at school.

The mechanical side of handling books as related to schools and teachers has been given attention far beyond what is necessary. Numbering, mending, covering, charging, discharging, each has its place. It is necessary to teach children the proper care of books; but there is little that really counts beyond, first, a proper selection of books, and, second, giving the right book to the right child. It is time that every teacher and every librarian learned, in a limited way at least, to be a "professor of books." Emerson first spoke of this professorship and it has been advocated by many scholars. If we wish the public libraries to be in reality the "people's university" we must take this position upon ourselves and no matter how incompetent we may feel—and who would dare feel other than incompetent?—we must make those who come to us in any capacity for assistance feel that we are at least trying to fill the position of "professor of books."

To come directly to the subject under discussion, this matter of teaching was introduced into our local normal school three years ago. This normal school is made up of students from the high school to the number of twenty. The course of study is for two years and is practically what is given at the regular state normal schools. Each of our state normal schools has, however, a good library and a librarian able to give personally or in the classroom the necessary instruction in the use of the library. It was evident that under the present arrangement of our local normal school the students would be deprived of the instruction in the use of the library unless the public library were ready to offer its services. This was done, the offer accepted by the

superintendent of schools and by the director of the training class, and arrangements completed whereby the librarian should give instruction to these students in such use of the library as, in her judgment, was the most beneficial to teachers. To remove any possible suspicion of faddism, the librarian stated to the director of the training class as nearly as possible what it was her intention to teach. She also stated that as the pupils of the high school of necessity have a great deal of help from the teachers—most of their work at the library being by the direction of the teachers—they had had but little experience in searching for material; in fact, were unable to use the library economically.

Arrangement was made the first year whereby the librarian was allowed time for twelve lessons, each half an hour in length, and to be given once each week. Experience soon showed that the half-hour did not give enough time for drill and that the weekly lessons did not give the pupils enough time for outside work. The second year the plan was changed and the librarian was allowed twelve lessons of one hour each to be held fortnightly instead of weekly, and with the privilege of requiring as much outside work as seemed necessary to obtain good results. At the same time this course was added to the work of the kindergarten training class. This arrangement proved a success and this library course has now become, by the authority of the board of education, a part of the course of study required by the teachers' normal class.

It is not possible to lay down any hard-and-fast rules regarding this course of study, but definite and systematic it must be. The pupils must be required to do work which shall be corrected and returned. They must be required to study and recite. General lectures produce little beyond a hazy picture of the books on the shelves and perhaps an increased knowledge of some books previously slightly known.

A statement of the actual work done at each lesson during 1908-9 may not be out of place:

Lesson 1.—A general talk on the Public Library, how and by whom maintained, plan of administration, and the duties of the Board as compared with those of the Board of Education. The different departments and the field which each is expected to cover and the methods by which material may be found in the library.

Definite instruction was given on what is meant by classification and the system used was explained. Instruction was given on the use of the card catalog, the pupils taking notes, and for the next lesson a number of subjects, authors, and titles were assigned to be looked up—as, "Give general arrangement of the cards under the heading, Bible, Shakespeare, United States." All of this was recited definitely at the next lesson and reviewed frequently. As far as possible the pupils were supplied with mimeographed copies of the rules to be learned so as to avoid much taking of notes. These rules were explained and notations made if necessary.

That the pupils might acquire as general a knowledge as possible of children's books during the course, a limited number of the best books for children were placed at their disposal, in duplicate. They were asked to read not less than twelve of these before the close of the course. They were also given at this first lesson a few general rules on the requisites of good books for children and were required to read designated articles on children's reading.

Lesson 2.—The pupils were required to recite fully on Lesson 1 and to discuss the children's books which had been read. While it is not the work of the course to teach how to tell stories, that being a part of the work of the director, it is often profitable to have the stories told and this is done as often as there is time. For this second lesson further articles on children's books were assigned to be read.

Lesson 3.—Further general recitation and discussion of children's books. The use of the reference department explained, and notes given on the dictionaries, encyclopedias, atlases, and several of the works of this class. Also problems given to be looked up in these books. The reading of the children's books with the discussion and the story-telling was continued thruout the year.

Lessons 4 and 5.—Work of the reference department continued and the pupils required to recite on the books studied and to look up the problems assigned.

Lesson 6.—What is meant by bibliography was explained and instruction given on how to prepare a bibliography. Subjects were assigned to the class, each having a different subject, preferably one which would be useful in school. This should be a selected bibliography and each pupil should be given a brief outline with a statement of how many entries are expected. The pupils have always been given until the end of the course to prepare this bibliography and it has counted one-half toward their examination.

Lesson 7.—(1) Illustrators of children's books; (2) Periodicals useful to teachers: education; travel and outdoor life; drawing and craftsmanship; birds and nature; science. Indexes to current periodical literature.

Lesson 8.—Because of the prominence given to the Lincoln anniversary this year a special Lincoln program was prepared. This gave opportunity to teach how this should be done and was of practical use as it was prepared by each teacher for her grade and was used in her school.

Lesson 9.—General review on the card catalog, Poole's *Index*, and reference books most useful in the schools.

Lesson 10.—An effort to give a general idea of the value to the teachers of many of the books which indirectly relate to school work, such as books of travel in the countries of which they are teaching; biography, particularly American biography; illustrated books, as Arthur Rackham's *Midsummer Night's Dream*. This is a very wide field and difficult to treat advantageously. Merely to give authors and titles would be valueless. Possibly further experiment will reveal a better plan.

Lessons 11 and 12.—Devoted to the rounding-up of the discussion of children's books and to the telling of stories.

Later the director of the class gave an examination. This with the recitations and the bibliographies decided the pupil's standing. On the average the work was well done. After graduation these pupils will be engaged in the city schools, and the fact that they now are frequently to be found at the library consulting books, which they have previously studied, shows that the time was well spent. The result of the work relating to children's books will be more noticeable in the use made of these at the school delivery stations.

The fact that the superintendents and teachers of normal schools have found a course of instruction in the use of the library of value is sufficient warrant for its introduction into the local normal school. The fact that of necessity the course must be more brief in the local school than in the state normal does not warrant its omission.

I am thoroly convinced that such a course as this, altho brief, must have a helpful influence over these very young teachers, who have been unable to

give time or else have not had the inclination to read many of the things which they should have read before leaving the eighth grade. If the course is held to be profitable according to the literary and instructive value of the books read and examined, rather than to the amount of technical knowledge of the care of books acquired, it will surely be a success. Perhaps not immediately, but it will grow and improve as the teacher-librarian grows with the subject which she is teaching.

A somewhat different application of these lessons was made last summer at the county institute. A deposit of several hundred children's books and brief reference books was made at the building where the institute was being held. Instruction was given for one period each day for five days and the teachers were given one free period each day during which to examine the books. This was done with a view to improving the county-school libraries.

It may seem to many that this teaching should not be the work of the librarian, but why not? It is the duty of the library management to extend the usefulness of the library, and by what means can this be more effectually done than thru the teachers to the pupils who are our future adult readers? And I will add that the earlier the stage at which this teaching in the schoolroom begins the better, because of the chance of reaching the child who leaves school very young.

A necessary requisite, if a plan such as that given is to be a success, is that the teachers learn to understand the library and the librarians learn to understand the schools. To obtain the best results there must be absolute harmony and sympathy between these two institutions working with the same end in view.

THE STUDY AND USE OF BOOKS

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The first school was organized about a book, for the purpose of its study and interpretation. It is fair to suppose that the last school will, also, be organized around a book, for the purpose of its study and use.

So long as primitive man could store up his acquired knowledge in the form of modifications of the nervous system and transmit it to his children thru heredity or by oral instruction, there was little need of the school; but there came a time when this primitive man began to dream things and see visions which could not be recorded and transmitted thru nerve modification, and which could not be adequately transmitted by word of mouth. He began to seek some new form of recording his thoughts and feelings and aspirations, to carve them in stone, to paint them on the bark of trees, and to cut them on wood. These expressions at first, we are led to believe, resembled very closely the things which they were intended to represent, but in time they became mere characters, not looking like the objects which they were intended to

represent. They became mere symbols. These symbols needed interpretation. When the growing mind came to the parchment and sought to understand its meaning, he found someone was needed to stand between him and these symbols and interpret their meaning. It is fair to assume that the function of a teacher here arose, and that the conventional school came into being when the teacher gathered about him a number of learners and sought to interpret to them these signs and symbols on parchment and wood and stone.

What a wonderful fascination these mystic symbols must have had to the primitive mind; what magic, what mystery hung about them; how superior was he who had the power to look upon these symbols and translate their meaning, to read the thought of those who had lived and wrought in years gone by! It is little wonder that the book, with all of its fascination, became the entire concern of the school, and it is little wonder that the study of letters, the study and mastery of a book, came to absorb the entire energies of the school; it is little wonder that in time the study of the book became a sort of a fetichism, and that the mere juggling with words and sentences came to absorb the entire time of the schoolmen and to confuse and narrow rather than to enlighten and enlarge the minds of the learner. If we may believe what is said about the schoolmen, they had allowed all the energies of instruction to be turned largely to the study of words and of logic.

It was well for the school and for education that a Francis Bacon should arise and declare that this worship of the word, the symbol, the book must give way to a study and appreciation of the world of nature. How fortunate for the school and for the children who have long since passed thru it that men like Bacon fought the fight, broke down the doors of the schoolroom, and let in the suggestions and the educative influences of the world of nature! Fortunate for the school, also, was it that in later years the throb and thrill of industry, of the industrial life about it, began to break thru its walls and to affect the thought and method of the work within.

The book and its study and mastery have a place in the public school, but it would have been unfortunate indeed if the printed book should have prevented the children from the study and mastery of the book of nature and of the great book of the industrial and social life about them. While we may congratulate ourselves upon the large expansion of the inner life and work of the school and of its adjustment to the needs of modern life, it is very proper for us to be on our guard lest while we are opening the doors and windows to let in the world of nature and the world of industrial life, we shall not crowd out the world of history. It was unwise for the Chinese to pin the faith and practice of their schools to a book or series of books which contained the thought of one man. They sought not to adjust the school to the life about them, but to adjust its thought and practice to what was written in the saying of Confucius. It seems to us unwise that the early Christian fathers, in their great zeal for the life of the future, should have denied the desirability of a knowledge of the life that is; but I am sure that we would be just as unwise in the modern

school if, in our attempt to adjust ourselves to the needs of the present life, we should cut ourselves loose from the recorded experiences of the past and the prophecies and hopes of the future. With all of the enlargements of our subjects of study, let us not forget that the best of the past and the best of the future are stored up in a book.

Mr. Gannet, in one of his delightful essays, says that books are canned thoughts. It is one of those striking figures which arouse within us a feeling that we must have thought the thing ourselves before we saw it in his essay. Certain men have dreamed dreams and seen visions and they have recorded them on the pages of the book. These books upon our shelves are in very deed and truth canned thoughts, canned ideals, canned inspirations. If our particular desire on a particular occasion is for a particular brand of ideas on friendship, we step to our shelves and find thereon a certain can labeled *Friendship* by Emerson, or *Friendship* by Bacon. We take down the can, open it up, and feast our minds and heart upon the contents. It would be a sorry day for education if these stored-up thoughts and lives should be crowded from the shelves of our schoolroom, and if our children should be denied the opportunity of opening them and enjoying them. But it is easily seen that the figure carries with it the idea that if one is to enjoy these canned thoughts and emotions, he must be trained so that he can go to the shelf and recognize the particular brand of thought or emotion which he desires by the label upon the outside. The figure of canned thoughts also carries with it the idea that for one to get into the contents, he must have a can opener—some mechanical device by which he may open up to himself that which lies within. There is little doubt that thousands and millions of children sit and stand and walk daily in the presence of these stored-up thoughts and expressions, but whose lives are not touched or influenced in the least because between them and these ideas and experiences there is a mechanical separation thru which they are unable to break. Professor Patton has told us that only that is our environment which touches our life for good or ill. Books upon the shelves in a schoolroom which do not touch the minds and hearts of the children constitute no element in their spiritual environment.

Every word, in a certain sense, is a canned idea, and a peculiar form of the symbol designates the character of the language contained. A child must early be trained to recognize quickly these ideas and thoughts by looking thru these symbols. Professor Thomas Balliet has shown the difference between the teaching of the word as an end and the word as a means, as an end to be looked thru rather than a thing to be looked at. In addressing a body of normal-school students, he asked them to look at a certain window pane and tell him some one thing about it. They spoke of its dimensions, of the quality of the glass, of certain defects in it. Then he asked them to look thru the window pane and tell him what they saw outside. They spoke of the trees and the birds, the sky and the flowers. This illustrates two ways of studying a word. Some teachers direct the children's attention to the word as an

end, as a thing in itself; others teach the child to see thru the word to the idea that lies beyond. When the child comes to the printed page, he finds two sets of symbols. One appeals to the ear, the other to the eye. If our object is to train him to get quickly the thought and feeling of the page, it must be our purpose to help him to see quickly thru the word to the thing behind. The symbols which appeal to the eye must become an open window thru which he sees the passing panorama of life and activity described on the page. The book in a certain sense becomes a sort of telescope, a sort of a field-glass. When he is properly trained, he may take this instrument and turn it upon ancient Egypt: time and space disappear and he sees an extinct civilization of the time of Rameses the Second; he sees the millions of people living in the Valley of the Nile, erecting the pyramids and building their mighty temples. When he looks thru it, an Alexander, a Constantine, a Charlemagne, a Napoleon, a Washington are brought close to him as objects of study.

It is surprising to discover that many children come thru twelve years of public-school instruction without having gained any facility in the use of a book as a means to an end. The book is made so often an end in itself that the child comes to feel that when he has finished a book he is thru with it. That may be so if the finishing of that book has increased his power to use books as a means to an end. All too often the schools fail to carry him on to this point of efficiency. In visiting a certain school, I found a sixth-grade class studying geography. The topic for the day was banana culture. The children had their geographies in hand; the teacher said, "Turn to the twenty-sixth page; the first paragraph will tell you under what climatic conditions bananas are grown. When you have found out what is said, you may show me by closing your books." The books were opened quickly, the children fastened their eyes and mind upon the paragraph. Very shortly some books were closed. Others remained opened for a considerable time. One child asked the teacher for some help on a word or two. Finally the teacher said, "All of you may close your books now, as we cannot take longer upon this point. Charles may tell us what he got from the paragraph." The next paragraph told of the kind of soil; the next one how the banana plant was cultivated, how it was gathered, and how it was shipped, etc. It is hard for me to see how the time could have been more profitably spent. These children were learning how to use a book as a means to an end. They were learning how to look thru the words and thru the printed page to the thought that lay behind.

In the eighth grade of the same school the teacher was assigning some problems in arithmetic. She assigned the problems to various members of the class. As soon as a child was assigned a problem, it was noticed that he looked very carefully at his problem. When the last one was assigned, the instruction was given, "Close your books, lay them aside, stand, and pass to the board." The children passed quickly to the board; the name of the child

and the number of the problem were written, and immediately work began upon the problems. One boy said that he could not remember one large number. The teacher told him to take his book to the board and copy it. It occurred to me that this teacher had discovered a thing which had escaped my attention thru fifteen years of teaching—that one way to save time and to clear a child's thought was to train him to read the problem and understand clearly its conditions. These children, unincumbered by the book, with the problem clearly in their minds, went directly at the solution and in a remarkably short time had arrived at the proper results.

It is one thing to teach a child to read and it is another to train him to use his reading power in accomplishing desired ends.

In another school I have seen a certain teacher take a class of seventh-grade pupils to give an illustrative lesson in the use of a book and how to find any topic desired. Twelve different textbooks on American history were placed in the hands of twelve different pupils. The remainder of the class had in their hands the regular textbooks. The teacher explained that he would call for a certain topic and that he wished each one to find what his particular book had to say on that subject as quickly as he could. The topic mentioned was the cotton gin. It was interesting to watch these children, who were taking this lesson for the first time, to see the different methods employed to find the desired topic. Some began at the first of the book, turning page by page; others seemed to remember about what portion of the book this topic had been treated in and sought that particular place; others began at the table of contents; quite a number turned directly to the index. Some at the end of the five minutes allowed had not found the topic, some saying that it was not in their books, and others admitting that they did not know how to find it. After five lessons under the direction of this teacher, it was interesting to see the rapidly acquired skill of these children in the use of a book. There are some people who go thru life without having learned a few of these simple mechanical things, which once learned save a great amount of time in the use of books.

I have spoken briefly on the use of a book in accomplishing an end outside of the one who is using the book. I wish now to speak of certain results accomplished within the reader himself. It is easy to see that the chisel in the hand of the sculptor produces certain objective results. It is not so easy to see that that same chisel reacts upon the hand that holds it and produces certain spiritual results upon the sculptor. When we are training a child to use a book as a means to an end and as he is acquiring this power, we are conscious that certain results are being produced upon him that far transcend in importance the immediate ends accomplished. First of all I believe that the mastery and right use of a book may tend to develop within the user a finer imagination. Mr. Stevenson tells us in his delightful essay on the "Lantern Bearer" that someone has said, "A poet has died young in the heart of even the most stolid," but Mr. Stevenson prefers to think that "a poet lies dormant in the

heart of even the most stolid, awaiting the touch of some influence that shall bring him to life and cause him to spring to his feet."

There is little doubt that over our country, in our public schools, thousands and millions of children never have this poet awakened within their minds and hearts. I doubt whether any other instrument placed in the hands of the teacher can be so easily used to arouse this latent imagination as a good book. The most imaginative minds that have ever lived have conceived their thought and placed it in these books. The teacher whose own imagination has been aroused can take this book as a magic wand and wave it above the child's dormant mind and open for him a new world of life. The child may be born in a home with a father and mother in whose hearts the poet is either dormant or dead; there may be little chance for his imagination to develop unless he is touched by the right book, at the right time, in the hands of the right person. I have heard a superintendent of one of our largest city schools make a charge that his lack of poetic imagination was due to the fact that his teachers had not compelled him at the proper time to expose himself to that body of imaginative literature which would have helped to loose the wings of his imagination.

Another subjective result upon the user of a book is the effect which it has upon his vocabulary, either oral or written. There are those who contend that what we read has no effect upon our style of speaking and writing. However, such a master of English as Robert Louis Stevenson claims that his style was acquired by the patient study and imitation of four English authors. There can be little doubt that the wonderful style of Abraham Lincoln, used in portions of his first and second inaugural addresses, and notably in his Gettysburg speech, were the direct or indirect results of his study of the Bible, of Shakespeare, and of *Pilgrim's Progress*. He was a man of large elemental ideas and emotions, but born of common parents and reared among common folk, where he could have acquired little power in oral or written expression. When he stepped forth upon the platform at Gettysburg to utter his deep thought and emotion, there can be little doubt that the style of these masters afforded him an adequate vehicle for the expression of his thought. I am inclined further to think that in a larger sense every life is the better for having some mode of expression. Experiences arise within us for which we have no adequate expression, and being unexpressed, they leave us no stronger, and sometimes weaker. The study of a book or the committing to memory of certain fine passages often gives us an adequate form of expression for fine emotions, and this expression, even tho it be in the language of another, leaves one the stronger and the better for having found an adequate utterance for his thought.

The last subjective result which I shall mention is the influence of the thought and emotion of the book upon the conduct and character of the reader. I am inclined to think that a book is one of the most powerful forces to influence the life and conduct of the children which can be brought into the school. Many of the questions which arise in a child's mind about his conduct and

action are of such a character that he hesitates to ask the father or mother or teacher concerning them; but a wholesome book put in his hand at the right times answers his questions, clears his thought, and determines his action.

Whatever may be said about hurtful literature, more can be said about good literature. It is within the power of the teacher to train the child in the use of a book so that thruout life he shall have a constant and immediate communion with the best thoughts and the best ideals that the best men and women of all times have thought and uttered.

It is doubtful whether the school thru any other one line of endeavor has so great an opportunity to influence the life of our country as thru the use of books. Let us teach nature, and teach it well; let us teach industry and teach it well; but let us not forget that when we teach the children the twenty-third psalm, or *A Man without a Country*, that we are utilizing a force, the most powerful force, to unify the minds and hearts of all the people, to create a spiritual unity, and to arouse a common patriotism. With all the enlargement of our curriculum, let us continue to give the book its proper place in the school and in the lives of the children.

DISCUSSION

J. A. WHITEFORD, superintendent of schools, St. Joseph, Mo.—A traveler in the Nile Valley will find many of the natives still using the wooden plow and threshing with the flail. This is true because the people there have not felt the need of something more modern and more labor-saving. The tools used by the people in a country are an index of their progress and intelligence.

In many schools the books in use are as much out of date as the wooden plow and the flail. Pupils and teachers are dependent on the textbooks, and instead of the books being of service to the children, they are often a positive hindrance to their advancement. In most schools the textbook is the mainstay of the teacher and main source of information to the child. In many countries, especially England and Germany, the teacher depends less upon books and relies more on her own store of knowledge. The teacher does more of the work and the pupils are less dependent on the printed page and must pay strict attention to lectures and use the notebook freely.

Books in the school may be considered as texts, reference books, supplementary reading, and general-library books. In too many instances the books are poorly arranged, the subject-matter confusing, the print bad, and the illustrations not well chosen. Such books are poor tools for children. Textbook makers have many sins both of commission and omission to answer for. Too often the language used is more difficult than the subject-matter treated. In many texts in arithmetic the definitions and formulae are more perplexing than the work to be mastered. The arithmetics have been filled with improbable and artificial problems, such as clock problems, hare-and-hound problems, the effort seeming to make the work as abstruse as possible in an attempt to provide mental gymnastics. Many of the histories are simply a compilation of facts. Valuable time has been squandered in a daily grind of memorizing useless facts and no time taken to read choice biographies or inquire into the lives, manners, and customs of the people. On account of the difficulties found in books, parents, even tho intelligent, are not able to give children much assistance and often find fault with the school because the books are mysterious.

In most schools, especially in rural districts, the textbook is the course of study, and teachers follow the text religiously. The grammars have given page after page to parsing and diagramming, the cry being that teachers are too busy to give any time to

"unessentials," such as the study of the classics. The result has been that much of the instruction in grammar has been a hindrance rather than a help. Pupils have learned rules, definitions, and classifications, have made hair-splitting distinctions, and their mental life has been loaded down with useless lumber as a result of using a book poorly edited.

Many of the grammars are filled with mechanical exercises to be memorized, or blank spaces to be filled which, when completed, have no value. The composition work has too long been devoted to abstract topics in which the children have no interest, when it should come from a mind stimulated thru interest; otherwise such exercises are mechanical and without life.

The reference books found in most schools are too often a detriment rather than a help. The dictionaries and encyclopedias, without the guidance of the teacher, are often misleading, and are usually beyond the capacity of the children. Dictionaries should be used in all the higher grades, should have a direct bearing on the work in hand, and should be purchased with much care and not by weight or from the bargain counter.

Supplementary readers are perhaps among the greatest aids in school work. In selecting these care should be taken to choose books of story, myth, fable, and choice literature of all kinds and to omit textbooks, as children are not attracted by the last named. Books must be adapted to the reader in different stages of his development. There is a literature for children as well as for grown-ups. In many schools the books have been chosen because of their supposed value from the standpoint of the adult. Books appeal to children when they contain matter that is adapted to children's minds. Fables, folk-stories, ballads, and biographies are plentiful and children read them with avidity.

The modern school provides a wealth of literature for all grades and instead of a dull grind thru one text children are reading with enthusiasm and understanding a great variety of high-class books. It is not necessary that children comprehend everything they read, especially upon first reading. It is better to give them an appetite for choice things that afford an introduction to standard authors, rather than use books of one syllable which are without life or value, in an attempt to keep on the child's level.

Library books for schools have likewise been poorly selected and have been poor tools for children. In most places the school library has been made up of sets, such as the complete works of Dickens, Hume's *History of England*, *Britannica*, or what has been considered a good class of books, such as Butler's *Analogy*, *Prince of the House of David*, *The Royal Path of Life*. These books are valuable in their place, but the place is not in the common school. Books for the home and school have too long been selected for adults and for adults of strong mental power and development. At the World's Fair at Chicago, Gladstone's ax was placed on exhibition and one could readily see that it would require the strength of three or four men to swing it. The average wood-cutter could do no work if such a tool were placed in his hands; yet the schools have been purchasing men's tools for children's use and teachers have wondered why children have not read them eagerly.

A good estimate of the taste and ability of a teacher may be had by looking over the library she has selected for her school. If the shelves contain sets of Darwin, Huxley, and a number of Collier's latest editions you may at once conclude that she lacks in one essential quality—an understanding of child mind. If we are to secure the best work from children we must give them efficient tools, and this the school has not done. The children have asked for bread and we have given them a stone. They have longed for the best in literature and instead we have provided dull readers of the scrappy variety. We have insisted on having compulsory laws passed, have punished the truant boy because he cared not for school when the fault was with the publisher and the teacher. The apostasy of the small boy, like that of Roger Williams, is doubtless often justifiable.

*WHAT DOES EACH, THE LIBRARY AND THE PUBLIC
SCHOOL, CONTRIBUTE TO THE MAKING OF
THE EDUCATED MAN?*

CHARLES E. CHADSEY, SUPERINTENDENT OF SCHOOLS, DENVER, COLO.

The question of the proper function of the public school is, of late, receiving new consideration in the minds of educators and the public. Many are expressing a profound lack of confidence in the results of public-school education. It is realized that the public school, as it exists today, does not meet the needs of the majority. The curriculum of the elementary and the high schools is most admirably adapted to the needs of the minority, and unquestionably many receive a most excellent preparation in our public schools for the work which they are to do.

The willingness to admit that new fundamental material for the course of study must be secured before our public-school system really meets the needs of our community is, in itself, a most encouraging sign. At the present time most educators and reformers are contenting themselves with the expression of their discontent, and with general suggestions as to the necessary changes to be made in the course of study in order to bring about its greater practicability.

There seems to be substantial agreement that inasmuch as we are living in an industrial age, and that the future is bound to emphasize the industrial side of life, we need to train an increasingly large percentage of our young people in such a way that their usefulness in industrial life will be as great as possible. This seems to imply that work, manual in its character, or studies designed to give to young people familiarity with the fundamental processes underlying industries must receive greatly increased emphasis. In order to accomplish this there must be decreased emphasis upon studies now considered fundamental in the ordinary curriculum.

Among the criticisms frequently made upon the present course of study, we hear that books rather than things are emphasized, and that the aim of the reformer should be to decrease the prominence of books and emphasize other things. This fact, or the probability of a changed emphasis upon books, brings this subject distinctly within the province of this department.

Those who are interested in the public library, and appreciate its wonderful value to education, must instantly become keenly interested in any discussion which threatens in any way its relative importance as a factor in education.

Without question the study of books is often overemphasized. In many cases the organic connection between the fact as found in the book and the fact as found in life has not been established. Mere book education easily degenerates into the most formal and useless kind of training. One may admit all this and much more, and yet most keenly object to any intimation that the usefulness of the library as a force in education should be questioned. No

matter how great the changes in the course of study may prove to be, no matter how great the emphasis which may be laid upon teaching the children those things which apply directly to their livelihood, so long as these changes are made intelligently, so long as real effectiveness in training young people for life is secured, so long will the pre-eminent importance of the printed page as a vehicle of knowledge be maintained. If these changes in the curriculum are secured it must result in a different use of the public library, and in an increased demand for certain kinds of literature.

That any form of education in the twentieth century which does not place great dependence upon the library can be successfully maintained is an obvious absurdity. The general question, therefore, implied in the question assigned to me, remains a vital one.

No man can be truly educated who has not learned to use books intelligently and habitually. No process of education which fails to develop the habit of the intelligent use of books can meet successfully the demands of the age. The public school must continue to accept the responsibility of developing power to use books intelligently. Those families in which the use of the library by the children develops naturally thru the intercourse and influence of the home are, unfortunately, a very small minority in most communities. Were this not true, the problem of the public school would be considerably simplified. There are, comparatively speaking, very few children who have homes with an environment which will encourage the continued, persistent, intelligent use of books.

The problem before the public school is not to develop the habit of reading, but to develop the habit of reading wisely. America is now a reading nation, but nine-tenths of the matter read is valueless and often vicious. The excessive use of newspapers and popular magazines is so common as to be almost universal. If the public school met its responsibility effectively, the results in the sale of these papers and magazines and in the demand for a different type of literature would be most marked.

In papers presented before this department in preceding years, practically every suggestion as to effective co-operation between the public library and the public school has been considered most carefully and wisely. To present a new suggestion along these lines would be, for one who has not given the matter unusually careful consideration, a practical impossibility. The only thing that remains is to call attention to the fact that in too few cases have the wise suggestions for educational co-operation been carried out in a really effective manner.

Educators all agree that the public school is the place where power to think must be developed; where appreciation of the true, the noble, and the beautiful must be secured; where the mastery of vigorous expression must be encouraged; and that, above all, it is the place where discrimination between right and wrong must be attained if the child is to go into life with the right ethical outlook. To these general functions we must add the development

of the particular powers and aptitudes of the individual child in such a way that he will be able to find his sphere of usefulness in life.

If the public school accomplishes this, or even if it puts into operation the forces which will result in the securing of these powers, it can safely be called successful. While the public school itself must be the vitally persistent thing in the education of children, the library immediately should assume a most important place. Few people who develop wide interests and who have the habit of wide reading are able to possess private libraries sufficiently large to meet their needs satisfactorily. The public library at this point steps in and makes possible, to all who have the taste, the opportunity for unhampered development.

The great problem which the school has in connection with the public library is to develop the habit of the proper use of the library. The great problem which the library has in connection with the school is to secure as extensive a use of the books available as is possible. The two ways ordinarily used should react upon each other. The really effective public library should have the most liberal rules possible as to the use of its books by the schools. Every schoolroom should be furnished with select libraries suitable to the maturity of the children in the room and changed sufficiently frequently to bring about the maximum of usefulness. Every school building should have a well-selected reference library containing all the books of general information which are needed permanently. The general school library should doubtless be the property of the school district, but the temporary schoolroom library should be under the auspices of the public library. To make this room library most effective there should be the fullest co-operation between the teacher and the librarian. Few teachers have a sufficiently extended acquaintance with available literature to insure to the children intelligent use of the library. Any capable, sympathetic teacher, however, should be able to divine with considerable accuracy the specific needs of the individual children with whom she is working.

The library, however, will not have reached its maximum effectiveness if there does not develop the habit of reference to the general library and visits by the child to the library. This should never be overlooked by the teacher or the librarian. There should be devised frequent conditions which necessitate the direct, individual use of the public library by the children. When we find the well-selected schoolroom library in constant use, and also find the pupils of the room welcome and frequent visitors to the central library, the forces for effective work are probably at their maximum.

Unfortunately in many cases the teachers fail absolutely to realize the value to children of steady, persistent use of the library. Too frequently the teacher herself, being unfamiliar with the library, in no way encourages the children to use it and gives no systematic directions as to the selection of literature suitable for her children.

The expense involved in establishing even small schoolroom libraries,

thru the necessity of duplicates, or the large number of books required seems to the librarian an insurmountable obstacle. Under present conditions the child who uses a library is more apt to develop a reading dissipation rather than a power of wise selection. He reads much but reads to little advantage. The books which he reads are not vicious—few public libraries are careless in this respect—but they are often worthless, and have no real power to develop anything in the child which is worth while. A study of the books most frequently borrowed by both adults and young people is enough to endanger one's optimism as to the value of the library itself. Only thru the most persistent, painstaking co-operation between the library and the school can we hope for great improvement in this respect. The value of the public library is, in many cases, to be compared with the value of the public school to the individual. Theoretically, immense benefit should result. Practically, habits are often formed which are injurious rather than helpful.

Of late years the idea of making of the school building a community center has been much advocated. Successful experiments are now being carried on in many of our larger cities. Thru the use of the school building as a community center the value of the school library to the community could also be immensely increased. I think none of us believe that this movement is destined to fail. The time will doubtless come when the school building will be a very real social center of the community, and when that time comes it is safe to say that every school building will have its branch library in which will be found most carefully selected books for the use, not merely of the children but of adults.

The relative importance of the contribution of the library to the making of the educated man will not diminish thru any changes in school curricula which are destined to come. The public school must remain the institution which initiates forces which will develop the educated man. The library must continue to be the vital factor in his final unfolding into real power.

THE LIBRARY AND THE SCHOOL¹

J. EDWARD BANTA, SUPERINTENDENT OF SCHOOLS, BINGHAMTON, N. Y.

Mr. President, Ladies and Gentlemen of the American Library Association: At the request of the President of the National Education Association, Dr. Lorenzo D. Harvey, I bring you the greetings of that Association and the wish that the work of the two organizations may be more and more in harmony than it has been in the past. The greetings are from the largest organization of teachers and educators in the world, with a paid membership of more than forty thousand. As the years have gone by, meetings have been held at

¹ The following address was delivered before the American Library Association at its annual meeting for 1909, the author having been appointed as the representative of the National Education Association to that body. It is published here because of its value as a discussion of the relations of public libraries to public schools.

which eighteen thousand and more have been present; the one theme, that of giving opportunity for the widest discussion on all matters educational. It was not with a view of slighting the library side of education that, as the different sections were organized and named, the library section came to be number fifteen. This year the National Education Association will observe its fifty-second meeting at Denver, beginning during the following week. Of the earlier sections, naturally there was a superintendents' section, which holds, now, a separate meeting. There was an elementary-school section; a normal-school section, manual training, art decoration, and the like followed; but within recent years, really in 1896, there was organized the library section of the National Education Association. Its work is substantially that of the American Library Association, but without going into the technical part of the work. The discussions grow out of the main theme of the morning, the relation of the library to the school. It is the greeting of that Association that I bring you this morning.

The old view of the relation of the library to the school was this, that the library was a very useful adjunct of the school, not necessarily an adjunct, but if it appeared at all, it was as an adjunct. The newer view is that the National Education Association and the American Library Association are the organized representatives of the conviction that education as it belongs to the school—I use that term in distinction from home and church—consists of two parts and that these parts are of equal importance. The school today in the narrower sense recognizes the fact that the library field is of equal importance with its own.

Look for a moment at the time that is spent in school. Statistics recently gathered with reference to vocational and industrial education have brought out the fact that for the industrial classes the time spent in school is from four to five years, and during these years, from thirty to forty weeks per year. Breadwinners, to a very large extent, if some education is gained, must get it thru the library, thru the museum, thru study clubs, or in the hard experience of life. The fact that so many are looking for the advanced education is evidenced by the large number of correspondence schools in which the breadwinner with meager wage, saving, and paying out large sums that not only pay for the instruction received but, in addition, allow these schools to lay up large sums of money, is evidence that the breadwinner is anxious for more education. Perhaps 5 per cent. of the pupils in our public schools complete the secondary education. Possibly 1 per cent. receive the college education. So the field, merely in years and in weeks, it is evident, rests to a large extent with the library as equal in importance with the school. Today the slogan of education is not for the few, but education for all and all the time, as Superintendent Cary has put it in a recent article of his published in *Harper's Weekly*, under date of May 22, and in this he goes into detail to show us how education can be for all the people and all the time with the right system of library work. We are all well aware that home education is on the wane. In

Colonial times, barring the three or four months that the boy or girl went to school, and purely for book knowledge, book learning, the education was in the home. At the present time it is passing from the home to the school and to the library. In Colonial days the organized system of schools as we have it today was an impossibility because of the fact that the home was ready to do so much. Now we have come to look upon the school, and I include in that term the library, as the panacea for all the ills that afflict humanity. Humboldt, the philosopher, almost a hundred years ago, uttered the statement, "whatever you would put into a nation's life you must put into its public schools."

It is interesting to the student to know how nearly the development of the public library, or libraries as a whole, runs along the line of the development of the public school. Our earliest mention of funds for the public school carries us back to 1621, in the Virginia colony, when the chaplain of an incoming ship goes about among the people upon it and collects money with the idea of further education among the children of that colony. It is charity. For a long time even the Massachusetts colony left it to the contribution of benevolent individuals that had to do with the public school. The library has gone thru precisely this same history. The first funds and the first books were the contributions of individuals. The next step is a natural one. There is a recognition of the real need. The public schools are a necessity. There were those who could not attend the charity school, but the public school becomes a necessity and the state takes notice of it. The same is true of the library. Library history is recent compared to the history of the public school. The next step was favoring laws on the part of the state. These came before funds were contributed. Libraries have gone thru the same history precisely. Then came the establishment in so many of our states of a department of the public-school system. We have its parallel today in the state department, not generally adopted yet in all the states but nevertheless adopted by some, showing that that history is to be repeated along this line also. Library appropriations are made by the state that I represent, the state of New York, and in a number of the other states, the exact number I cannot tell you at this time.

But with the establishment of public schools there was necessary the training of those who were to take charge of those public schools, and so there were established the special schools known as normal schools. When libraries became general and their advantages were recognized, and the necessity felt, the training school for librarians followed in a natural way. Then came state reports and state inspection from both sides, the library and the school. It is of marked interest to notice how very carefully the developments of these two branches run along parallel lines. So that experience shows that in education there are these two branches which have to do with the school in the broader sense.

I referred a moment ago to the years at school. Compare these to the years of the working period of a man's life, and we find that they are very limited.

The library is to furnish the material for study during this larger number of years. At school there is the one who is to direct. He has the advantage of law behind him and is a master. From the library side, the attraction must be that of a librarian who is a friend, inviting, with the impulse that the child has had from the school for knowledge. Public-school attendance in all the states now is compulsory, but for the library it is a willing attendance. There we get a difference. It must work out in the character of the librarian. "The great function," says an old writer, "of the teacher is to give a strong taste for reading." Huxley, taking that as a text, said, "To teach a child, boy or girl, how to read and then not to make provision for what that reading shall be, is as senseless as to teach the boy or girl the expert knowledge of the use of the fork and spoon and then provide no physical food that he may use these implements upon." The purpose of the school is to develop self-governing, self-directing men and women worthy of citizenship in a great nation, and the great end of the school, as of the library, is to develop character. In the pedagogical profession we lose sight of that too often. There is so much detail in the work of the schoolroom in the work of supervision that oftentimes the real purpose is lost sight of; yet we all know that character is induced by habit, and habit comes out of action, and action itself comes from reflection. It is reading that induces, I believe, more reflection than comes from any other source. There is always the personal element that must enter into the influence upon character. Some years ago a committee of experts appointed by the National Education Association took occasion to send out a good many letters asking this man and that, "What was the influence that came into your life to give you a trend toward the work that you are doing?" and over half of the replies which came back were along this line, "It was the reading of a book." The competent and enthusiastic librarian can direct, after acquaintance, to a large extent the reading of a community, and in directing that reading he is directing also the thought of that community.

The old idea of the library was that of a reservoir into which was gathered the material for use within a narrow range. The modern idea of the library is that it is a fountain sending out as well as gathering in for itself. Ideals, I have said, are largely drawn, and thus character molded, from reading. The mechanics of reading it is the business of the schools to teach, and the schools today are trying to give an impulse also toward the kind of reading, but the pupils are with us so short a time that the direction of that reading is to remain with the library. And so there is to be the work of the two going on together. . . .

What I have said leads up to this, that the school today is looking for the co-operation of the library. The library is ready, I believe, to co-operate with the school. In fact, I think sometimes that the library has been more than ready to take the advance and is taking the advance in this co-operation. . . .

You may not agree with me in the detail that I am to give you in regard to how we are to co-operate.

First of all, I believe the superintendent of the public school in every city should be one of the library trustees. Now, I am not saying this for personal effect, because yesterday when I was asked on three different occasions by what right I was attending a meeting of the American Library Association, when I was not a librarian, I had to save myself from physical violence by saying, "I am a library trustee;" and I was allowed to enter the ranks. Take those cities and villages where the library and the school are working together in harmony, and you will find that the superintendent is one of those who are most heartily in favor of this co-operation, of this union. He recognizes the fact that the boys and girls are soon to leave school, with education unfinished, and unless they have found the path to the library they are likely to find it to some other place. . . .

Employers of labor are advocating better education on the part of those who are in their employ. In this work, I say, the library is to have its field, and is having its field; but the superintendent of schools, who has to do with the oversight of educational matters, should be directly connected with the library in order that jealousy may not come from either side, in order that both may reach their greatest efficiency; and so I say that is where our by-laws or constitutions that forbid it are at fault. I advocate it from the school side, that the superintendent be made *ex-officio* a member of the board of library trustees.

One other point. We have our training schools for teachers. We are advocating in many of the states that there be added to the curriculum library training, and it has been begun in certain of the normal schools. Not the detail of the work, not the technical work, all of it, but enough of it so that the teachers who are going into the public schools shall know how to use a library, how to use a card catalog, shall understand the value of indexes, of tables of contents, of a preface, shall know the nearest library to which they may direct their pupils. Where that has been worked out, as it has been in certain of the normal schools in New York State, it has resulted in marked advantage, so great advantage that other principals of normal schools are advocating the insertion of that subject in the curriculum and requiring it of teachers. Conversely, with all the benefits that our libraries are receiving in the library schools along the line of technical work, I wish the time may come when those who go out from the library schools may serve an apprenticeship in the public schools also, that they may understand young life a good deal better than it is understood today by many of the librarians. Of course, I am not speaking personally to those who are here. Those who are here have had a wide acquaintance with the younger life; but there are librarians, as there are teachers, who never go outside of the village, who never attend a national meeting of the American Library Association, nor a state meeting of librarians, nor a round table of a district, nor visit a library if it can be avoided. Those are the ones to whom I am referring, who need that wider acquaintance with younger life and young capacity in order that the school work

of the library may be better done and better adapted to the personality of the child.

From the school side we advocate a pedagogical section in every library. Teachers, you say, should buy their own books, but it is not always true that the salaries of these teachers have been advanced in proportion to the cost of living. In the library they should find the tools with which they may work. Of course there is a limit to the amount of money that will be expended, but there are not a large number of new works on pedagogy that need to go upon the shelves. In pedagogy, as in other fields of books, there are many that are ephemeral and soon will be superseded, but a limited amount may go into that pedagogical library. Let it be a special section if you wish, generally it need be, and let these books be regarded as professional books and the teachers not limited to the seven-day or the two-week period, but allowed to take these books and use them for the period of a month if need be. Where that is done I think the superintendent will find that his growing teachers are making use of it. That is where your superintendent may well come into play as a trustee. He is advocating the purchase of books on the one side and the use of them on the other, and if there is any advantage at all resulting from a wider acquaintance with the study of pedagogy, it is going to accrue to the advantage of the students in the public schools.

There are certain other books that teachers need to use sometimes in the schools. Let them be a privileged class again. I know a library in which the laboring men take a special interest. They, thru the foremen and the men best informed, ask for certain books, and when these books come, their time to read them is not limited; they wish to have them a longer period than the seven days, and they are treated as a privileged class. Let the teachers be a privileged class in regard to certain books, as well.

All well-organized libraries today have the young people's library, or department, or room. Let the teachers assist in the selection of these books. They have not a wide acquaintance with them to start with, but as our normal schools take up this work they are coming out with a range of books adapted to first-year work, second-year work, third-year work, and the like. Let them have a hand in selecting the books for this library, and now and then it may be of advantage also if they can take some of the newer books to the schoolrooms, and read a passage here and there to the children to interest them.

One purpose all along this line, as you see, is this—that we may get the boys and girls, today, in the schools, into the library when they have finished with school, and before they have finished with school. Of course, there is a large part of the attendance upon a library, of a library's constituency, who are past the school age. I am not speaking for them alone; I am speaking for those who are now in school, I am speaking for those who have so recently left school. What will draw the children to the library? A story hour, fairy stories for a particular grade. These can be developed very quickly into biography, historical details, history stories, with no lack of interest on their

part. That means that your library shall have stories and the librarian shall know how to tell them, as well as the schoolman knows how to tell stories, and only the skillful one can hope long to attract the attention of the children.

An effective way that I have seen worked out in the library is to have exhibits of the drawing done in the public school, put up once or twice a year in an empty room in the library. We call it an art gallery. Children have a particular piece put there. They are interested to enlist their friends to go, and when they have gone to the library, the visit does not stop at the art gallery to observe that piece of drawing, but is extended into other rooms. People see more books than they ever saw before, see titles of books that at once attract their interest, and are told by the efficient and enthusiastic librarian, "These books are for you, they are not for us." "May I take one of these books home and read it?" "Why, certainly, that is what we want you to do." And so it enlarges the field of usefulness of that library.

The assembling of books by grades at a particular time has a marked advantage, and the schoolmen today recommend it to librarians, and ask it of them as well. There are other exhibits besides those of drawing—historical exhibits. It may be that they are merely exhibits brought from another city, but they are giving a wider range of knowledge, and with that, I believe of inspiration, that will work out later in life.

As the new books come in, let the teachers know. It costs something to print the list and to send it out. Sometimes it can be done with the printing press; sometimes the daily paper will take it up; sometimes it can be done thru mimeograph work or any of these machines that make many copies, but all of it having reference to the wider education and the greater use of the library.

Then, too, systematic instruction in the use of the library in schools, not by the teacher, but by someone from the library, should be encouraged. A teacher comes to be associated with the arithmetic and the geography and the language, but a new voice attracts attention. I have seen this matter worked out in the schools. An assistant librarian who was formerly a school teacher offered to take up the work and it was interesting to see how quickly the children responded. There can be a definite course of instruction along this line. Now, this is not new. It is being followed by a number of cities of my acquaintance, and a number of other librarians have written in regard to the matter. . . .

I want to say just a word in regard to the librarian. I have referred to it already. I mean with respect to personality. In school the personality of the teacher counts for more than all things else. We have in New York State a man who was known while alive as the Nestor of educators, Dr. Sheldon, of the Oswego Normal School. He had a national reputation. The last time he attended a meeting of the associated academic principals, one man had spoken upon character in the teacher, and he limited it virtually to personality. Another had spoken upon methods, special training, the province

of the normal school. Others had spoken upon education. The question was put to Dr. Sheldon, "How do you rate these three elements in a teacher?" He said, "On a scale of ten I put character, represented as personality, five points. I put broad education as three, and I put the technical education, 'methods,' as you have called it in the discussion here today, two." Now, if that is a necessity in the public-school teacher, where the children come under compulsion, if they do not come otherwise, compulsion from home and compulsion from the state, represented by the attendant officer, while the libraries' attraction must be the impulse toward learning and a friend at the end of it, what must that be? It seems to me that there must be what Pestalozzi meant when he said, "The essential element in education is not teaching at all, but is love." The essential must be what was meant by Thomas Arnold when he said that "the master of Rugby must be first a gentleman, and after that a schoolmaster"—first of all the man and the woman, after that the technical librarian.

DEPARTMENT OF SPECIAL EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—FRANK M. JACK, Institute Conductor, State Normal School, River Falls, Wis.

Vice-President—MISS CORNELIA D. BINGHAM, Deaf-Oral Dept., Chicago Normal School, Chicago, Ill.

Secretary—MISS ELIZABETH E. FARRELL, Inspector of Ungraded Classes, New York, N. Y.

FIRST SESSION.—TUESDAY AFTERNOON, JULY 6, 1909

None of the officers and no member of the local committee being present, Carroll G. Pearse, superintendent of the city schools of Milwaukee, Wis., called the Department of Special Education to order at 2:30 P. M. in the First Baptist Church. He stated that Miss Jennie C. Smith, the president of the department, had resigned, and that President Harvey had appointed Frank M. Jack of the State Normal School, River Falls, Wis., to fill the vacancy. Mr. Jack being unable to attend the meeting, the President of the National Education Association had requested Mr. Pearse to preside.

Edward M. Van Cleve, superintendent of the State School for the Blind, Columbus, Ohio, was elected secretary, *pro tem*.

Carroll G. Pearse, superintendent of schools, Milwaukee, Wis., read the first paper on the subject, "Public Schools for the Exceptional Child."

A. O. Neal, superintendent of schools, Franklin, Ind., read a paper on "The Indiana Plan for Handling Truants, Indigent and Pauper Children." The discussion was opened by J. M. McCallie, principal of Centennial Grammar School, Trenton, N. J.

Ben B. Lindsey, judge of the Juvenile Court of Denver, being present, was called to the platform and addressed the department upon his method of handling truants and delinquents. The discussion was continued further by Dr. Frank G. Bruner, of Chicago; W. R. Callicotte, of Denver; L. C. Gee, of Greenville, Tex.; Mrs. Caroline Le Favre, of Denver; Mrs. Conkey, of Cincinnati; and Miss Theda Gildemeister, of Winona, Minn.

The president announced the following committee on nominations:

J. W. Jones, Columbus, Ohio.

Miss Agnes Roche, Pittsburg, Pa.

Frank M. Driggs, Ogden, Utah.

Adjournment was taken to 9:30 A. M. Thursday.

SECOND SESSION.—THURSDAY FORENOON, JULY 9, 1909

Acting-President Pearse called the meeting to order at 9:30 o'clock.

L. E. Milligan, superintendent of the Montana School for Blind and Deaf, Boulder, Mont., read a paper on "Practical Industrial Training and Trades for the Exceptional Child."

Edward M. Van Cleve, superintendent of State School for the Blind, Columbus, Ohio, presented "The Outlook for the Blind Youth."

Mrs. Ida Hood Clark, director of elementary manual training, Public Schools, Milwaukee, Wis., described "Open-Air Schools as Developed in Germany and England."

The discussion was participated in by Acting-President Pearse; Mrs. Wallace, of Denver; Miss Rinehart, of Kensington, Md.; Dr. Frank Bruner, of Chicago; and Mrs. Le Favre, of Denver.

L. C. Gee, superintendent of schools, Greenville, Tex., spoke of the need of knowledge thru study on the part of teachers in public schools of the children to discover who are exceptional children, defective in any particular, and offered the following resolution, which was adopted:

WHEREAS, The defective children of our schools require the special attention of teachers, and teachers need all the assistance in this respect that they can secure, be it

Resolved, That a committee of three be appointed by the president of the department to recommend the best books and apparatus that pertain to this work; that no one be placed on this committee who has something to sell; that this committee report to the incoming president of the department in time to secure, if possible, the inclusion of its report in the annual volume of *Proceedings* for 1909.

For such committee the president appointed:

Frank G. Bruner, Child-Study Department, Public Schools, Chicago, Ill.

Earl Barnes, University Extension Lecturer, Philadelphia, Pa.

Walter F. Dearborn, The University of Chicago, Chicago, Ill.

The secretary was instructed to communicate to the pastor and officers of the First Baptist Church the thanks of the department for the use of their comfortable auditorium as a meeting place.

REPORT OF THE COMMITTEE APPOINTED BY THE DEPARTMENT OF SPECIAL EDUCATION TO RECOMMEND A PLAN FOR THE INVESTIGATION OF THE PROBLEM OF THE EXCEPTIONAL CHILD

A committee to "recommend a plan for the investigation of the problem of the exceptional child" was first appointed by the Department of Special Education, of the National Education Association, at the Los Angeles convention, in July, 1907. The personnel of the committee was as follows:

Maximilian P. E. Groszmann, Plainfield, N. J., *Chairman*.

George L. Leslie, Los Angeles, Cal.

F. M. Jack, River Falls, Wis.

J. W. Jones, Columbus, Ohio.

O. H. Burritt, Batavia, N. Y.

This committee reported briefly at the next convention which was held at Cleveland.

Upon motion the committee appointed at Los Angeles was discharged, and a new committee appointed to take up the work. The new committee was composed as follows:

Maximilian P. E. Groszmann, Plainfield, N. J., *Chairman*.

Olin H. Burritt, State Institution for the Blind, Overbrook, Pa.

Mary T. McCowen, Deaf-Oral Department, Chicago Normal School, Chicago, Ill.

Elizabeth E. Farrell, New York City.

Lightner Witmer, University of Pennsylvania, Philadelphia, Pa.

This committee, being without funds to pay expenses, has found it impossible to hold frequent meetings or to enter into any extended correspondence. Nevertheless, by conferences, meetings, and exchange of letters between the members of the committee they practically agreed on the following points:

First: that it cannot be the function of a committee to suggest an elaborate and detailed plan for the investigation of the problem referred to them, or for any other scientific problem.

Second: that such work can legitimately be done only either by individuals interested in researches of this kind; or by bureaus, commissions, and societies organized for the purpose, and whose functions would be permanent, or would be in force until the work was accomplished.

Third: that such work would require sufficient endowments of money to enable those who undertake it to carry it into execution. Such endowments will eventually have to come either from philanthropic societies and individuals, or from public funds, communal, state, or national.

Fourth: that the plan of investigation should embrace the following distinct fields of research, viz.:

- a) The development of a suitable classification of exceptional children;
- b) The securing of complete statistics of exceptional children;
- c) The determination of the causes of exceptional development (hereditary, congenital, and environmental);
- d) The suggestion of proper provisions for the different groups, or classes, of exceptional children;

e) The advancement of methods by which all agencies that are directed toward the study and relief of exceptional conditions of child-life (medical, educational, legislative, or sociological) may be organized into unified effort.

Respectfully submitted,

MAXIMILIAN P. E. GROSZMANN, *Chairman*
MARY McCOWEN
OLIN H. BURRITT
ELIZABETH E. FARRELL
LIGHTNER WITMER

The Committee on Nominations reported as follows:

For *President*—Edward M. Van Cleve, superintendent of the Ohio State School for the Blind, Columbus, Ohio.

For *Vice-President*—Frank G. Bruner, Child-Study Department, Board of Education, Chicago, Ill.

For *Secretary*—Miss Martha Bell, State School for the Deaf, Mt. Airy, Philadelphia, Pa.

On motion the report was accepted and the secretary was instructed to cast the ballot of election.

The department then adjourned.

EDWARD M. VAN CLEVE, *Secretary pro tem.*

PAPERS AND DISCUSSIONS

PUBLIC SCHOOLS FOR THE EXCEPTIONAL CHILD

CARROLL G. PEARSE, SUPERINTENDENT OF SCHOOLS, MILWAUKEE, WIS.

In the older days of mining the methods of separating the precious metals from the ores in which they were found were very crude and wasteful. A considerable portion of the gold and silver remained in the waste portion thrown out upon the dumps of the separating mills. In some cases this proportion of waste was so great that when the chlorination process and other improved methods of separating the metals from the ore were perfected, it was found profitable to rework the entire "dumps" of some of the old mills, the precious metals obtained paying a good return for the expenditure of labor and materials.

Our early-day educational plants and the methods used in them somewhat resembled the early separating plants for ores. By these crude methods we managed to take care of the average boy and the average girl. They got a fairly good education and were able to maintain themselves in the school, passing thru the successive grades and receiving our stamp of approval in the form of a diploma at the end of the course of studies. But the schools in those days had a great amount of waste product; boys and girls who did not fit the system of education in vogue were constantly being crowded out and dropped along the educational roadside. We had not come to a realization of the fact that it is the duty of our public educational system to take care of all the children of the community. We supposed that we were doing our duty when we made provision for the ordinary child. Exceptional children did not come within the scope of our public-school activities.

In those elder days, no one thought of educating a deaf child in the public schools. Such a child was a "dummy." He could not communicate intelli-

gently with the members of his family even, to say nothing of sustaining any comfortable relations with other members of the community. Unless he was fortunate enough to find his way into some state institution or private school especially organized to care for such children, he grew up without any adequate education and was, as a result, thruout his life barred from the employments of normal people and from association with those who enjoyed the sense of hearing.

Blind children were necessarily excluded from the public schools. There was no way in which the intelligence of these blind children could be effectually reached or their minds effectually trained. Unless some institution opened its doors to them, they grew up with such education and information as could come to them incidentally in their homes.

A considerable number of children belonging to a class whose discovery was celebrated by William Hawley Smith under the caption "born short" were crowded out of the public schools. Sometimes they were permitted to drag along year after year learning practically nothing, acquiring habits of idleness, losing whatever self-respect they might originally have possessed, and becoming possessed by a feeling of bitterness and resentment toward the school in which they did not fit, and toward their associates who were more fortunate in intellectual endowment, and who looked down upon them.

Out of the school were crowded also many boys and girls who were what we now call "disciplinary" cases. These children had quick tempers, or were morose and sullen or obstinate, or were disposed to be cruel or abusive to their schoolmates, or had tongues which they were unable to govern, and who said things to their teachers or to their companions which could not be permitted in the school community. These children were, in hundreds of cases, forced to leave school, either because their dispositions and the methods necessary in their education were not understood, or as the result of some outburst of temper or disobedience, or abuse of fellow-pupils, with which the schools had not learned how to deal.

There were many children who were merely slow—children whose minds unfolded less rapidly than those of other children, or who were particularly dull in certain subjects. Sometimes these children were diffident and lacked self-confidence to do as well as they were able to do. Too often such cases were allowed to take the line of least resistance; they fell behind their classes, they were dropped back into a lower grade, or failed repeatedly to secure promotion. Soon the time came when the child must go to work, or when he chose to leave school rather than suffer the humiliations of repeated failures and low class standings.

We had not learned then that numbers of children who appear exceptional are not really so. Many children who are dull or unduly nervous or difficult to manage in the school exhibit these undesirable qualities because they have insufficient food, or food of a sort which does not afford proper nourishment. These children were often permitted to continue in this condition lacking the

strength and energy which proper food would give, and for that reason frequently becoming discouraged and falling behind. The school passed unfavorable judgment upon them and was quite willing to see them go out into life to begin its battle poorly prepared. We had not then learned, either, that many children who appear exceptional give this impression because of physical defects, imperfect eyesight, dull hearing, nervousness, adenoid growths in the pharynx which frequently impede breathing or circulation and make many children otherwise normal appear dull and stupid.

But in our schools at present, we have come to recognize our responsibility for the correct diagnosis of all these pupils who for one reason or another appear to be, or are, exceptional. The proper remedies are applied to those children who only appear to be exceptional. Proper food is supplied either in the way of co-operation with the home, or with luncheons supplied at school, or thru some public or charitable agency. Children who are suffering from physical defects are examined to ascertain the nature of these defects; proper glasses are provided for children of defective vision; treatment is given to improve the dull hearing; imperfect teeth are corrected or rebuilt or replaced; curvatures and other malformations are corrected by the necessary surgery or by proper treatment and appliances; adenoid growths are removed; and in all these ways the children who are fairly normal, but thru lack of attention or thru misfortune have appeared otherwise, are brought into a condition which enables them to do their school work and to grow up into capable and useful men and women.

For the slow or backward children, where the slowness is not too great to be reached by means of special work given by the teacher, a period is set apart during the day so that the children who need special help may receive it. In this way many children who might become discouraged and fall behind are enabled to keep up with the class. For those children whose handicap is greater, on account of much absence from school, or lack of opportunity for previous school attendance, or lack of knowledge of the language, the ungraded class is provided. In these classes pupils receive much individual help from sympathetic and skillful teachers. They are assisted and encouraged to make such progress as their abilities make possible. Frequently children in these ungraded classes do in one year the work ordinarily done in two or three or four years, and many boys and girls are enabled to bring up their work so that they may enter classes with other children of their age and general advancement. Frequently these children would become discouraged and leave school if such an opportunity were not given.

The boys and girls who are afflicted with bad tempers, or bad personal habits, who are confirmed truants, who are abusive or otherwise undesirable companions for normal children, are placed in disciplinary schools, where, in charge of wise and skillful teachers of strong personality, they are able to form habits of obedience and application; they become good-tempered and desirous of carrying out the necessary regulations and conforming to the

requirements of the school. Frequently these children, after correcting their bad habits, can be returned to the regular classes and show themselves good citizens of the school community.

For those who are subnormal intellectually, not feeble-minded, but "born short" in some particulars, classes for exceptional children are provided. In these classes, which are placed in charge of skillful and sympathetic teachers, these children are given such treatment as they are able to receive, they get such training as will increase their powers of nervous and physical self-control and their power of application to whatever task may be in hand. Much of this work consists in physical training and manual employment. The muscular and the nervous control frequently need as much training and development as the intellectual control. It is not expected that members of this class will in many cases become entirely normal, but they can be put in a good attitude toward the school and toward the pupils about them; can form habits of industry, and can receive education in those lines which their limitations make possible. They can in most cases be saved from a future of uselessness and idleness, from the formation of bad habits, and from an attitude of antagonism and bitterness toward the pupils about them and toward society in general.

For children who are blind, or whose vision is so defective that they cannot depend upon their eyes for education in the regular classes, special classes are provided in connection with the elementary schools. These classes work in rooms fitted for their special use. The children learn to read by means of point letters, the regular textbooks of the school being reproduced for them in this form. They recite with seeing children in the regular classes; they study in charge of a specially trained teacher in the schoolroom which is fitted up for them; their writing is done by means of little "slates" or typewriters made for the use of the blind. They have manual training as the other children do; they play with the other children at recess; they use their roller skates upon the cement walks like other children, and, so far as possible, are made to forget that they are blind. They are, by this plan, enabled to remain in their homes instead of being sent away to become inmates of institutions.

Deaf children are taken care of also in connection with the day schools. They are brought together from the different parts of the city into a school where, under the charge of a principal and teachers thoroly trained for the doing of this work, they are taught the same things which other children learn. Without the use of the sign or manual language they learn to read the lips of those who speak with them and to use their organs of speech so that they can talk like hearing children. By the time they have finished the work of the grammar grades they are able to do this quite readily and in a large majority of cases acquire the ability to be members of the community, moving about freely, communicating with people they meet, and engaging in many employments which are open to people who have the sense of hearing.

This development of the work of teaching exceptional children in connection with the public schools has had two beneficial results.

First.—These children, unfortunate in one way or another, have been brought into, and given the benefits of, our system of public education. They are no longer crowded out of the schools as waste material. They are a portion of the material furnished by the community to the schools. The system has now so far adapted itself to the needs of all the children that these are educated in comfort and fitted for usefulness.

Second.—Regular classes have been freed from the incumbrance frequently placed upon them by the presence of these exceptional children. The time of the teacher can be devoted entirely to those children who can profit by the instruction given to the class. The necessity for taking large portions of the teacher's time for these special cases to the neglect of other members of the class has been done away with. This has resulted in great benefit to the normal children, who get more and better instruction and who are also freed from the unfortunate influence which these special cases sometimes have over normal children who are obliged to be in their society.

This study of the needs of exceptional children has not yet been completed. The classification of exceptional children is still going on. Methods and instrumentalities more perfectly adapted to their education will be devised year by year, and no doubt new classes of children who require special treatment will be discovered. All this will lead toward making the public schools more perfect instruments for the education of all the children of the state.

THE INDIANA PLAN FOR HANDLING TRUANTS, INDIGENT AND PAUPER CHILDREN

A. O. NEAL, SUPERINTENDENT OF SCHOOLS, FRANKLIN, IND.

The method of handling any class of cases will of necessity depend upon the previous legislation.

Indiana's truancy legislation is in harmony with that of the other states having such laws. The best detailed discussion of this subject is found in the 1908 report of the state superintendent of public instruction.

By the enactment of 1897, children between the ages of seven and fourteen were required to attend schools for twelve weeks. This term was changed in 1901 to the full term of school in the corporation in which the pupil resides.

The enforcement of this law has been attended with many difficulties but is now on a satisfactory basis, as the report for 1908 shows. There were 110 truant officers who made 66,000 visits, bringing into school 26,000 pupils. Of these, 7,500 were given aid at a cost of \$22,000. Salaries amounted to \$32,000, making a total of \$54,000, or exactly \$2.08 for each child brought into school.

The executive officer known as the "truant officer" is appointed yearly by the county board of education. This body is composed of the township trustees, who have charge of the schools of their respective townships, the county superintendent of schools, and the president of the school board of each city.

This truant officer, appointed in May, begins service in September. His compensation is \$2.00 per day for actual time spent in discharge of his duties. Previous to the opening of school each corporation must furnish him with an alphabetical list of pupils of compulsory age. This list is taken from the enumeration list which gives the age and birthday of each child, certified by the parent under oath. Thus supplied, he is ready to begin work. Calling at the school, he checks up with the enrollment of the school and proceeds to bring in children not enrolled. This he does by visiting the home and presenting the law to the parent. It then rests with the parent to get the child into school. If this is not done, he visits the home again and leaves a legal notice which requires the parent to have the child in school within five days. If this is not done the truant officer files complaint, the judge orders the parents concerned into court, and the parent is fined \$5.00 to \$25.00, to which imprisonment may be added.

Thru the year the truant officer makes weekly visits to the superintendents who furnish lists of pupils who are habitually tardy or absent, and the same procedure is followed. Usually a warning is sufficient, but occasionally a case pushed to the limit has a very helpful effect. If upon investigation it is found that the family is unable to provide books, material, and clothing, the truant officer has power to purchase necessary supplies, present the bill to the school board who in turn certify the same to the county. The bills thus contracted are ultimately paid by the county.

In carrying out this provision many schoolmen find cause for concern.

A recent study of the administration of poor relief to school children in twenty-two cities ranging in population from thirty-five hundred to twenty-two thousand, and typical of the cities of the state, reveals a variety of practice that is neither truly charitable, educational, nor economical in its effect.

There seems to be little uniformity in the management of relief. One is led to believe that in many places inquiry into the merits of cases is *lax enough to permit the professional pauper to prey upon the community from year to year*. Reading between the lines of the reports received, one feels that there is such a duplication of relief agencies in many communities that the greatest extravagance is fostered, both on the part of the giving community and the recipients of the gifts. The school seems to have too slight contact with other charitable and correctional forces in solving the problem of relief and correction for the cities of the state.

The difficulty does not seem to lie in any lack of legislation, but in a lack of proper co-ordination of forces already in existence to carry the laws we have into effective execution. Some suggestions for the guidance of schools in the solution of this problem should receive consideration.

These suggestions, made by Superintendent Fitzgibbon, of Columbus, illustrate the methods employed in that city.

1. Careful investigation should be made to determine whether applicants for help are really indigent.

2. Families that are not indigent should not receive help.
3. Indigent families should be taught economy, so far as possible, in the use of books and clothing received.
4. Poor relief for school children should be administered by the school corporation in cities, not by the township trustees. There should be no duplication of agencies in this work.
5. Practically no clothing, except shoes, should be bought for needy children. Clothing may usually be supplied from well-to-do families glad to donate it.
6. There is little need of buying textbooks for needy children. An ample supply may usually be had from the more fortunate children who have no younger brothers or sisters to inherit them.
7. No child should be permitted to apply for help. In the beginning it is a burden and humiliation that should not rest upon him. If followed, it is a dangerous practice that will effectually train him for pauperism. When there is a father in the indigent family he alone should be permitted to apply for assistance for his children. This burden should not rest upon the mother if she is not the head of the family. The father is usually willing to shift this burden to the shoulders of the wife and children. If he is compelled to bear such burdens, and is able-bodied, he will often find a way to work for his family.

When the parent applies for help, compromise with him by asking him to furnish part of it—even a little of it—if you feel he can do so. See that what you know the child needs is actually bought for him. Whenever it can be done, a loan should be made to the father, rather than a gift given to him for his child.

Some juvenile courts in Indiana have held that the truancy law means not only that the parent shall send the child to school, but that the child shall come provided with proper equipment and decently clothed and clean. If this latter condition is not met, they hold that the whole child has not been sent to school and the spirit of the law has been violated.

While this decision has not been tested in higher courts, it has proven effective in many cases.

8. The school should work sympathetically with the city charities and Board of Children's Guardians.

9. Let relief be so administered at all times that the recipient may feel thru it, in the largest measure, the desirability of being able to help himself.

These suggestions are not made with the thought that they may be easily carried into practice. There is no royal road to the education of a part of any community from pauperism to thrift. The city, however, that has not had its tendencies toward pauperism weakened and its strides toward thrift and independence, on the part of its citizens, lengthened from year to year has not received that efficient service from its school that it should expect.

The juvenile court in its relation to schools is an important factor in Indiana and should be in every state.

By an act approved March 10, 1903, we have in Indiana not only the one juvenile court at Indianapolis under the wise direction of Judge Stubbs, but also a juvenile court in each county. This act provides that "in those counties that do not have a city with 100,000 inhabitants, the judge of the circuit court shall be the judge of the juvenile court."

In other words we have, in effect, juvenile courts which have jurisdiction over every county, township, city, town, and village in the state, and the powers of the circuit judge, coupled with his powers as juvenile judge, place the whole truancy situation entirely in his hands.

From this responsibility no circuit judge can escape. A bad truancy situation in a county cannot but be a reflection on the judge who presides as circuit judge, for his powers extend not only to the children but to the parents of the children.

Wherever this situation is appreciated and its principles applied, the school authorities have found this enactment effective.

The influence of an interested judge willing to lend the majesty of the law to the work of the schoolmaster is a very strong "big stick" to hold over parents who are not moved by any other sense of responsibility.

The following letter from Judge Montgomery, of Clark County, will be submitted as evidence of its effectiveness.

Dear Sir:

In the last year we have had hardly any trouble with truants. Whether it is good luck or the reason of the plan followed I am unable to say. However, I believe we have the correct system.

I have insisted that the prosecuting attorney hold *parents* accountable for truants. It is the duty of the parent to require children to go to school and to make it a misdemeanor for them to fail. That being the case, I have corrected a great many cases of truancy by bringing parents into court under the charge of permitting children to commit truancy. If this does not succeed, and occasionally there is a case when the parents are not able to control the truant, I proceed against the truant himself. More cases I have cured by suspending sentence and requiring some known officer of the court to visit the schoolroom occasionally and inquire concerning the boy or to visit the home with similar purpose. I have never found it necessary to bring a truant into court after suspending sentence, if he is followed up for a reasonable length of time.

I have found it necessary in but few cases to pass judgment on a truant and send him to any of the state schools. This, in brief, is our procedure, and as I see it now it is very successful.

H. C. MONTGOMERY

By the provision of the law establishing the juvenile court, the judge is authorized to appoint probation officers, one of whom is paid, and as many more as will serve voluntarily. This has proven in line with the Indiana plan of probation which has attracted the attention of the leaders in reformatory work. This probation officer follows up the ruling of the judge and has authority to see that the child lives up to the requirement. If a truant child, a report similar to the following is usually employed:

Name of Probationer.....
Address.....

	Attendance	Conduct	Remarks
Monday.....			
Tuesday.....			
Wednesday.....			
Thursday.....			
Friday.....			

Signature of teacher.....
School No.....Grade.....Week ending.....

The forms indicated here are the ones approved for use in Indiana and are furnished by the State Board of Charities. The working-out of this plan in Madison County under the direction of Superintendent Pittenger, of Alexandria, and Mrs. Pittenger as probation officer is typical of the best work done in the state.

Some facts taken from the work in Madison County may be used to show how the juvenile court and probation officer benefit the school. In the county there are at this time thirty-one persons reporting to the probation officer. Fourteen of the thirty-one are in the public schools. Their attendance is perfect and there is no complaint concerning their conduct. Every one of the fourteen is doing better in school than he did before being placed on probation. The teachers of probationers work with the probation officers to make the condition in the school as favorable as possible.

One of the greatest benefits to the schools is the fact that the probation officer is on the ground and that the law is being enforced. Many would-be offenders are kept in check by that alone and many parents take more responsibility for the conduct of their children as they come to understand the meaning of the law.

Some parents who feel that they are losing control over their children appeal to the probation officer for help, and in some cases a single visit has brought very satisfactory results.

One of the most helpful agencies in the handling of the truants and paupers is the Board of Children's Guardians which works with the probation officers.

An act passed by the legislature in 1901 provides that in each county in the state a board composed of six persons, three of whom shall be women, may be appointed by the circuit judge and be known as the Board of Children's Guardians of the County. They shall have the care and supervision of neglected and dependent children.

An act passed in 1907 defines a dependent child as "any boy under the age of sixteen or any girl under the age of seventeen, who is dependent upon the public for support, or who is destitute, homeless, or abandoned." A neglected child is "any boy under the age of sixteen, or any girl under the age of seventeen, who has not proper parental care or guardianship; or who habitually begs or receives alms; or who is found living in any house of ill-fame or with any vicious or disreputable person; or who is employed in any saloon; or whose home by reason of neglect, cruelty, or depravity on the part of its parents, or guardian, or other person in whose care it may be is an unfit place for such child; or whose environment is such as to warrant the state, in the interest of the child, in assuming its guardianship."

Such children are usually a problem to the public schools. It is difficult to keep them in school regularly; they are often offensively unclean; they are usually not supplied with books, and often they are of low moral tone. The Board of Children's Guardians gives great help to the schools by providing for such children. In many cases a conference with parents when they are

threatened with prosecution for contributing to the dependency of their children is all that is necessary; in other cases the fear that the children may be taken away from them will improve the conditions. In some cases the conditions are such that the board is convinced that the children have no chance and they proceed to take them.

A petition is filed by the attorney for the board with the judge of the juvenile court (Petition of Board of Children's Guardians, Form C., No. 1551), in which the reasons are definitely stated.

WHEREFORE, the board of Children's Guardians of County petition the Court to order that said child be committed to the custody of said Board.

The Board of Children's Guardians of County.

By

Attorney

On the order of the judge a writ is sent to the person having charge and custody of the child.

FORM K.—Writ for Neglected or Dependent Child and for Use of Board of Children's Guardians.—No. 1561.

Commanding the parent to bring the child before the judge of the juvenile court.

In case the Board of Children's Guardians believe that a child for whom they have petitioned will be carried out of the jurisdiction of the court they petition the judge as follows:

FORM G.—Board of Children's Guardians. Affidavit of Officer for Possession of Child.—No. 1557.

By the affidavit it is asked that a warrant be issued to the sheriff of the county directing him to take charge of such child and bring him before the judge.

If the judge grants the petition he issues an order to the sheriff giving him custody of the child until disposition is made of the case. This order is:

FORM E.—Order to Take Child into Custody upon Petition of Board of Children's Guardians.—No. 1559.

If on hearing the case the judge finds that the best interest of the child shall be served by making it a public ward, he shall, do so by making it a ward of the court, of the Board of Children's Guardians, or of the Board of County Commissioners, and he shall order that it shall be placed in a suitable home. The following decree of guardianship is issued:

. County Juvenile Court.

., Ind., 19

Under the provision of an act approved February 23, 1907, defining a dependent child and a neglected child it is hereby adjudged a dependent (neglected) child and made a ward of County, Board of Children's Guardians, or
Board of County Commissioners, or
Juvenile Court }

to be temporarily cared for in the proper institution until a suitable home is found for it in a private family by the guardian herein named, by the Board of State Charities, as the law provides.

.....Judge

The Board of Children's Guardians was organized in Madison County in 1902. Thru investigation and by advising parents and guardians and calling their attention to the laws they have improved the conditions surrounding many children without taking them from their homes.

A number of children have been taken by the board and placed in good private homes where they have equal chances with other children. Practically all of them, under the conditions in which they were living, were detrimental to the public schools.

According to the *Eighteenth Annual Report of the Indiana Board of State Charities*:

Fifty-four counties have Boards of Children's Guardians, and probation officers have been appointed in fifty-four counties. The importance of the work of these boards cannot be estimated. It means a real help. Every effort counts for the welfare of some unfortunate.

Much of what is submitted in this paper is taken from the *Report of Committee on Delinquent and Dependent Children*, of which committee the reader had the responsibility of being chairman. The recommendation of that body was as follows:

Your Committee recommends that every superintendent of schools should become familiar with the laws concerning juvenile courts, probation officers, boards of children's guardians, and the care of dependent and neglected children; that you insist that the laws concerning dependent and neglected children be enforced; that if the law does not require a parent, if he is financially able, to equip his children for successful work, you should urge its amendments in such a manner as to compel him to do so or be guilty of contributing to the dependence of his children; that you urge the judge of your counties to appoint boards of children's guardians and probation officers if they have not already done so. School officials, neighbors, and even the police are slow about interfering with family affairs in the interest of children even when the most distressing and dangerous conditions surround them, and it is our duty to see that officials be appointed whose duty it is to look after those who are helpless.

But someone asks, "Is this a part of the duty of the schoolmaster?" Shall we not rather look upon it as a great opportunity?

In the great Book of Books we find that the first man born on this earth was Cain and the first question of that first man was "Am I my brother's keeper?"

Shall the same be the last question of the last man? The answer is largely in the hands of the schoolmaster.

Would that it were in my power adequately to praise the work of hundreds of loyal teachers in Indiana, whose inspiration and influence are stronger forces for good in overcoming these difficulties than any legal enactment; whose lives of devoted service are but the embodiment of that divine affirmation that "the letter killeth but the spirit maketh alive"—but you know that the

real acts of charity, or the real uplift of heartfelt sympathy is not a matter of statistics. The time will come when this will be a process of leading, not of driving.

I like to think of the tribute which was paid to our Hoosier hero, General Lawton. After his death one of his soldiers said, "I never heard Lawton say, 'Go on, boys;' it was always, 'Come on, boys.'" Would not this be an inspiring motto for the schoolmaster as he comprehends the great opportunity for real philanthropic and civic service in behalf of this special class of pupils?

DISCUSSION

J. M. McCALLIE, Centennial School, Trenton, N. J.—Usually there is little trouble in convincing the tax-paying public that the deaf and the blind children need a special kind of education. It is quite another proposition to convince this tax-paying public that the partially blind or the partially deaf also need special education. And the reason for this is that we are not agreed among ourselves as to the prevalence of these conditions. It is no wonder that our figures fail to carry conviction when our tests show that even in the same city, sometimes, the prevalence of defective eyesight or hearing in one borough will be five times as great as in another similarly situated. One of the chief causes for the variation of these statistics is the lack of a uniform standard for measuring vision and hearing. I recently made a study of many of the test cards used for testing vision, and found that the letters varied considerably in size. They also varied in style from the plain Gothic to the complex German type, and these letters were printed on cards varying in color from glazed white to black. Anyone can see that these variations would produce variations in results.

I also compared the relative visibility of a set of Snellen letters with the illiterate E which was of the same dimensions as these letters. Nine hundred and forty eyes were tested with each set under exactly the same conditions. Both kinds of letters were supposed to have been seen at 16 feet by the normal eye. My test showed that the largest number of eyes saw the letters at 14 feet, while the illiterate E was seen by the largest number of eyes at 24 feet. Yet we have been using these two measures supposing that they were equal! Is not this a convincing argument in favor of the adoption of a standard for testing vision?

To eliminate some of the sources of error in making vision tests, I have devised two sets of cards which have been used very successfully by teachers. One set is for testing illiterates, and consists of ten cards 5"×5" on which are the pictures of a boy, a bear, a cat, and a girl, all playing ball. The ball is a dot which can be seen at a certain distance. First one and then the other gets the ball as the cards are changed. The child watches the cards and tells each time which has the ball. He enters into the fun of the game and has his eyes tested without his knowing it.

The other set is for testing pupils who know their letters. It consists of twelve cards, 5"×5", having letters of different sizes so arranged on them that their order can never be remembered as they are presented one by one to the pupils. Both of these sets are to be used by the teacher, and, preferably, in her own schoolroom in the presence of all her pupils. These cards enable the teacher to make tests much more rapidly than by the ordinary tests.

Tests of hearing are usually made by *my* watch or by the voice test. More varying standards could hardly be selected. No two watches tick the same and no one watch will tick the same at any two times—its loudness varies with the amount it is wound up or run down. As to the voice, who will say that the loudness, pitch, and quality of John Smith's voice in Maine is the same in loudness, pitch, and quality as the voice of Mary

Jones, of Mississippi? Yet we gather statistics made by such tests and wonder why they differ so widely. To overcome these sources of error, I have devised a simple audiometer, the operation of which is based upon the simple fact that the loudness of sound varies when the opening thru which it passes varies. It consists of a sound-proof cast-iron box about $4\frac{1}{2}'' \times 4\frac{1}{2}'' \times 4\frac{1}{2}''$, containing a device for making a constant sound. The constant sound is produced by a metal hammer falling from a given height. The only way for this sound to escape is thru a V-shaped opening in the roof of the box, and then thru a three-way valve into stethoscope tubes to the ears. The three-way valve directs the sound into either ear separately or both ears at the same time, thus enabling one to test both ears at once or each separately. By turning a graduated wheel, the size of the V-shaped opening can be varied at will and the figure to which the index points indicates the loudness of the sound passing thru. This audiometer is so simple and easy of operation that it can be used by the ordinary teacher in her own room in the presence of all her pupils. Ordinary street or schoolroom noises do not prevent its successful operation. Pupils above the third grade may be tested at the rate of about one a minute. While this instrument was constructed primarily for school use, yet the thousands of tests that have been made by it prove that it is equally valuable for the accurate work required in psychological laboratories and by aurists.

It is hoped that these test cards and this audiometer will help to point the way toward usable standards for testing vision and hearing, and thereby obtain statistics that will be reliable and will admit of comparison.

THE INDUSTRIAL EDUCATION OF THE DEAF, BLIND, AND FEEBLE-MINDED

L. E. MILLIGAN, SUPERINTENDENT OF MONTANA SCHOOLS FOR DEAF, BLIND,
AND BACKWARD CHILDREN, BOULDER, MONT.

Ten years ago almost nothing was said of industrial education in papers read before the National Educational Association. This year, from the address of our President thruout the program, the cry of a commercial age is given deserved attention. The pendulum of this movement, like that of all movements in the past, will swing backward and forward until it reaches its proper balance, but I believe it will remain much nearer its present position than any place it has occupied in the last decade.

Getting our daily bread is the serious problem we all must face; therefore I would state, as the keynote of this paper, any education that does not aim to increase a child's ability to earn a living is misdirected.

A classical education is a beautiful thing. It enables us to ramble down the vistas of history, and pluck the fruit that has ripened there; but this kind of knowledge is like the gingerbread work around the eaves of a building—highly ornamental, no doubt, but it doesn't help to support the building. I don't know of a more pitiable object than a boy just out of college looking for something big enough for him to do. He is told that the world is his oyster, but he hasn't even a hairpin with which to open it.

Today the man in the overalls is the man who is earning good wages. A graduate of Johns Hopkins who is earning \$8.00 per day as a brickmason was pointed out to me a short time ago in Butte. He is a contented man. The other day I went down in our engine-room and picked up the book that the

head engineer was reading during his leisure moments. Imagine my surprise when I found it was Kant's *Critique of Pure Reason*. I do not know what Kant has to say about cleaning fire-tube boilers, but I do know that we have the best steam plant in the state of Montana, and that a man does not have to have clean hands and a white collar to be a scholar and a gentleman.

The schools for the deaf, blind, and feeble-minded have been pioneers in trade teaching. Eighty years ago the early schools for the deaf emphasized this work. Fifty years ago the schools for the blind took it up, and a little later the schools for the feeble-minded established industrial departments.

There is not a state school for special education in the country that is not devoting from two to eight hours a day in teaching the pupils to work with their hands. To this fact, more than any other, I attribute the success in after life of such a large percentage of the graduates of the deaf and blind schools. They have demonstrated at Yale University that exercising the left arm also increased the strength of the right, and that increasing the physical vigor gives additional power of attention and concentration to the brain.

Montana is the only state in the union where the three lines—deaf, blind, and feeble-minded schools—are concentrated under one management. When one has to spread a given amount of butter over three slices of bread it is bound to be thin in places; but, profiting by the experience and mistakes of the older institutions, we are trying to make our butter count.

Trade teaching to the deaf.—I will not weary you with a list of the trades taught in the various schools in the United States. These lists may be found in the *American Annals of the Deaf*, published at Washington, D. C.; in the *Outlook for the Blind*, published at Boston; and in the *Journal of Psychoasthenics*, published at Faribault, Minn. The deaf also support and are the chief contributors to the *American Industrial Journal of the Deaf*, published at Delavan, Wis.

All of the trades taught have their educational value. Printing helps the pupil probably more than any other trade in gaining a command of language. We look on it with disfavor in Montana, because so small a percentage of the boys follow the trade when they graduate. We teach Sloyd to the smaller pupils in all three schools, and try to impress upon the minds of the children that it is better to be born careful than rich.

In the degree with which our deaf pupils have met success after their school days, I will place the leading trades in the following order: (1) farming and dairying; (2) carpentry and painting; (3) cobbling and shoemaking; (4) printing.

Farming is frequently followed because the parents of the pupils are largely engaged in that occupation.

Carpentry and painting are taught together with us, because the pupils do nearly all the repair work that is being done around the schools and there is always a good demand for this kind of work.

This summer our deaf foreman and his pupils are erecting a \$5,000 dairy

barn. The entire building, including the plans and cement work, will be done with deaf help.

Cobbling, with shoe and harness making, has proved profitable in all the schools. There are a number of successful deaf printers and linotype operators. In connection with the general education of the deaf we are placing a great deal of stress on a business education.

I do not approve of the intermarriage of the deaf with the hearing, but marriages of the deaf with the deaf, provided both are not congenitally mute, nearly always turn out happily. We are endeavoring to teach our girls the domestic virtues, so that their future husbands will have no cause to complain of their school training. Have you ever noticed that a girl who is a good penman is nearly always a good seamstress? Excellence in any line of manual training is bound to react on the school work.

The blind.—With the blind we face a most difficult problem. Three-fourths of our education is gained thru the ear, so along literary lines the blind are at small disadvantage. In learning trades their obstacles are insurmountable. A certain number of the blind will be successful no matter what trade they follow. For instance, we had a Smith Premier typewriter that had been knocked off a table and landed on the keys. It was a complete wreck. One of our blind boys, however, took some spokes out of an old bicycle and fixed up the typewriter so that it again did duty in the schoolroom. I have no fears for this boy's future. On the other hand there are some of the blind who can never make a living. They are the born incompetent and would be failures had they perfect sight. All superintendents of blind schools have racked their brains to find profitable employment for the mass of blind pupils. Broom-making has been revolutionized with the introduction of machinery and brooms can no longer be profitably made by hand. A few days ago I visited the Chicago Working Home for the Blind. They have about eighty blind inmates, with twenty seeing employees to assist them. The institution is well managed and they turn out a large number of brooms, but it runs at an annual loss of between four and five hundred dollars per inmate. Broom-making is of value in strengthening the fingers, and for this reason we have just installed a new outfit. As a means of livelihood for the blind, it is a failure.

We have two graduates who make from twelve to fifteen hundred dollars a year with their music. We also have three who are supporting themselves as piano-tuners. These are exceptional cases. In spite of the popular opinion that the blind are musical geniuses, many of them cannot strike a note correctly.

Japan has given the blind a monopoly on the trade of masseuring. This line of work is being tried out in New York. I see no reason why a blind man would not make a successful osteopath or Christian Scientist.

It is only in the purely mental fields of endeavor, where the blind are not seriously handicapped, that we must look for successful occupations for them.

We are only increasing their capacity for suffering if we broaden their culture, without giving them some outlet for their energy.

Business training should be insisted upon. Their judgment and reasoning powers should be developed. Practice in running a school store has proved very helpful.

Blind children are notoriously fond of talking. Senator Gore has a national reputation as an orator. Rev. J. H. Milburn was for many years the blind chaplain of the Senate. Why not raise the standard of our schools and educate the blind for business men, lecturers, ministers, and lawyers? This seems to me, except in occasional instances, to be the most promising field for the blind.

Instead of herding the adult blind together in working homes, I would advocate a pension system as the most economical for the state and satisfactory for the blind themselves. Working homes have been experimented with pretty thoroly and are always centers of dissatisfaction. A system of pensions, varying with the needs of the individual and not beginning until the applicant is forty years old, would avoid the many disadvantages of a working home, and keep the man with shoestrings or an accordion off the streets.

The feeble-minded.—Work with "backward" children, as we call them in Montana, presents many interesting features. We take only the improvable grade at the state school. The idiots are sent to the hospital for the insane, where they receive custodial care. Some of our children have re-entered the public schools after their bodies have been built up by nourishing food, regular exercise, and healthful discipline.

True feeble-mindedness, however, is caused by a brain lesion or a defective nerve center. For this there is no cure, but in nearly all cases the child can be trained and his condition improved.

We begin with the more helpless children by having them pile the cobblestones with which the town of Boulder is plentifully supplied. Then they pound a chalk mark on a block of wood. The exercise varies with the ingenuity of the teacher, until the children can handle with reasonable accuracy the shovel, rake, ax, hoe, and saw. Last year the boys sawed and split all the wood used in the kitchen, bakery, and laundry, graded the lawn, and hauled four hundred wagon loads of stone off the ranch.

This summer we have nine feeble-minded boys at work on the ranch. They milk the cows, clear off sage brush, and keep the garden free of weeds. Feeble-minded children, as a class, lack judgment and common-sense. Their work is valuable if they are under constant supervision; left to their own initiative, they accomplish nothing.

A horse is of no value until he is broken and trained; then, with a good driver he will not only support himself but a man also. A feeble-minded boy is in much the same condition until he is trained and directed.

It is our object to establish a farm colony for the boys. As fast as they reach the limit of their capacity they are transferred from the school to the

ranch where they can have a good home. There, under skilled supervision, they can aid in supporting themselves and the institution.

The girls assist in the sewing-room, kitchen, and laundry. Many forms of industrial work have been tried. The most satisfactory have proven to be farm work for the boys and domestic employment for the girls.

These days there is no excuse for the child who sits on the bank. The water is fine and everyone has a chance to learn to swim. I am not sure but that our afflicted children, as a whole, have a better chance than the average child.

Many years ago the watchword of our educational work was *Know*. Later, when we realized that character was the foundation of success, it was *Be*. Now the word heard on all sides is *Do*, and the greatest of these is *Do*.

THE OUTLOOK FOR THE BLIND YOUTH

EDWARD M. VAN CLEVE, SUPERINTENDENT OF THE OHIO STATE SCHOOL
FOR THE BLIND, COLUMBUS, OHIO

For a proposed federal children's bureau, Florence Kelley's statement of the need (*Charities and the Commons*, March 27, 1909, p. 1254) begins with: "We want the federal children's bureau to furnish trustworthy current data in answer to the following questions, among others: Blind children: How many blind children are there in the United States? Where are they? What provision for their education is made? How many of them are receiving training for self-support? What are the causes of their blindness? What steps are taken to prevent blindness?"

It is significant that questions of this nature should be suggested by a leader in the study of social conditions. Already specialists in work for the blind had insisted that such inquiries are valuable, and imperative, indeed, if an increasingly numerous body of our people is to be reached and rendered more self-helpful. The old ideal of philanthropic care for an unfortunate class is being replaced by a social selfish ideal—namely, that the blind must not be deemed a necessarily helpless part of our citizenship, but, rather, that they should be sought out, educated as well as possible, and rendered capable of as much self-help as is practicable. Self-respect that comes thru education and thru ability to eat the bread of independence dignifies any citizen. True philanthropy is that which exercises itself in giving the other fellow a chance.

Unquestionably the outlook for the blind youth is better and growing better. One needs but to study the pictorial representations of the schools and their appliances in the published reports to be assured of improved material equipment. Whether or not the teaching in these schools is improving only one with years of experience and observation in the work of educating the sightless is competent to say; but that observers of intelligence and discernment are expecting better things is evidenced by the gratulatory comment upon the fact that in cases of recent change in the headship of several schools for the

blind thruout the country the new man, contrary to custom, had been called from the work of the ordinary public schools. Out of eight such changes in one year no less than six men of public-school training were brought into these special schools. A cursory inquiry makes possible the report of increased attention to the so-called practical in education of the blind. For example, following the lead of the Halifax school, business courses are being offered at the Pennsylvania schools both east and west and at the Ohio school, with possibly others, and at the Western Pennsylvania school the business theory is being practiced in a small store—items of the children's purchases being on sale by members in turn of the class in business, an application of the commercial schools' methods, using, however, actual and needed material and real money, instead of supposititious objects of barter and "college scrip."

While musicianship is not an inevitable accompaniment of blindness—indeed, the proportion of sightless people who do not even enjoy music is surprisingly large—many find a means of livelihood in performance or teaching. Here the outlook is better because the attitude toward the work has changed. Time was when most of the work of a school was done for show; the band and the orchestra were extra-prominent features. Ensemble work is practically valueless in preparing the youth to become self-supporting, so the greater emphasis is now being laid on learning for teaching or for performance that will pay.

Industrial education for the blind was recognized as a part of the state's obligation very early. When the Ohio school, the first to be opened as a part of the public-school system and exclusively a state project, was established in 1837, the legislative act provided for "instruction in letters and the mechanical arts." Trade schools for all children at public expense are now proposed, a thing that ten years or so ago was considered preposterous. I recall how I sustained a distinct shock in reading Dr. Paul Hanus' *The Modern School* when I came upon his suggestion that manual training might properly develop artisans and, indeed, become in fact, as in effect, training for trades. But for the blind and the deaf, training for a livelihood has been approved from the beginning. What pursuits offer attractive or possible fields of employment for the blind is the ever-recurring problem. For the most part they must be such as the individual can follow. Nearly a century's experimentation has shown that in only a few cases have establishments for the employment collectively of blind operatives proved successful in a financial way; yet the sense of obligation to furnish opportunities of employment by which such citizens may become partially if not wholly self-sustaining is felt no less strongly by attentive private and state interests. Mistakes in past administration are being pointed out and avoided by those responsible for the newest efforts toward rehabilitating the artisan who has become sightless, and there is a movement almost nation-wide to provide wisely the means of occupation to the adult blind. The sightless youth who will one day be an adult is deeply interested in this movement, as is his instructor. Traditional employments

that are still among the best for boys who must work with the hands are piano-tuning, broom-making, basket-making, and cane-seating of chairs. Girls have been employed manually in basket-making, cane-seating, knitting and kindred work, and in sewing. Weaving of art fabrics has recently been made a seemingly profitable means of employment for women, notably in Boston and Cleveland.

Our sightless youth about to enter on the struggle for a livelihood and to become a productive citizen finds his field limited much more by the incredulity of the seeing than by any lack on his part; that is, so long has the impression prevailed that the blind are merely the objects of pity and a dole that it is with the general public a fixed habit of mind. What can he do? Sometimes he can teach. As teachers of music many have already won notable success and many more will add to the record. As tutors, especially of backward children, they have won golden opinions. The infinite patience of a blind teacher whose work for a year came under my observation would put to shame any teacher of my acquaintance. And she had four or five children of whom one might reasonably despair. Not as teacher in charge of the usual public-school grade, but as tutor or lecturer in higher institutions the sightless youth has a good chance to succeed. Perhaps in answering the question, "What can he do?" I should keep away from the higher professional employments tho I could point to successful preachers, doctors, editors, lawyers. These are notable men and a rather small percentage of the whole. More young men have the business instinct. For such the outlook is made brighter by the successes of sightless men, won despite the incredulity and unhelpful inertia of associates. Such a one is a contractor of Cleveland whose business is erecting concrete buildings, bridges, and anything made of reinforced concrete. He secures the contracts, figures the material and labor, plans the operations of the workmen, is treasurer of his company. He is now engaged upon a contract to build a \$330,000 manufacturing plant. Taking courage by him, one of our boys recently decided he would go into business for himself. He has been for several years an acceptable salesman for a manufacturer of flavoring extracts. He now proposes to become manufacturer and sell his own product. Many small businesses furnish a fruitful field for the activities of those so inclined.

A fundamental consideration is brought to mind in the words, "those so inclined." A sightless youth has his inclinations and his special qualifications just as has his seeing brother. One of our graduates goes out this year with his high-school diploma, a certificate of proficiency as a tuner of pianos, and the diploma which declares him a competent broom-maker. His qualities of mind would lead him to some literary work and he will follow such a line if he can find a field; otherwise he has two other occupations to fall back upon.

The blind youth has been taught and can make well, perhaps, some things with his hands. Making of baskets from willow, and from combinations of straw braid and reed with willow, has proved a practicable employment with

reasonably good return to the blind operative. His best success will be attained in the prosecution of this work in his home and selling his product at retail, thus securing the profits of the usual two middlemen. In some places he may find occupation in making and renewing hair mattresses. The Boston mattress shop has been in operation for many years.

These, then, are some answers to the question, "What can he do?" In educating for efficiency the girl who is without vision is not lost sight of, and most of the answers to the question of capacity to do things apply to her as well as to the youth. She is just as anxious to be independent, and we are teaching her that her hands are capable of useful work. She succeeds well as teacher of piano or organ when well equipped; if possessed of courage, independence, and sagacity sufficient, she can find livelihood in canvassing or conducting a small business; handwork may secure some remuneration, tho the usual woman's handwork has not a very eager market. In many manufacturing plants are processes that a blind girl can effectively work at, if she gets the chance. One of our girls works in a box factory beside seeing operatives folding cartons and earning a living wage. I have used some of our girl pupils in the process of folding circulars and inserting them in envelopes, at which some were able to earn a dollar a day at the rates paid in our city's job-printing offices. From the home-making department of the school, commonly called the domestic-science department, we are sending girls back to their homes able and ready to become acceptable helpers in the household work, washing and ironing, cooking, scrubbing, sweeping—in fact, all the work of the housekeeper.

Not to multiply instances, enough has been said to show that in various fields of remunerative effort—and the number of activities in which the blind are engaged is much greater than here indicated—our youth are equipped, each in his several way, according to his individuality, to be engaged, or are already engaged. The outlook for success is better, I think, because I note a change in the attitude of the youth toward his problem. A speaker before this department said a few years ago in discussing a kindred theme that the blind youth had been nursed and coddled and his work bragged about so much that he had an unhealthy view of his civic and social relations. A diligent inquiry among a number of the older boys discloses a realization of this fault, and a new view of personal obligation to society and less harboring of the old assumption that the world owes each a living. This is one of the most hopeful signs of the times and is not confined to a single school, as conversation with other superintendents has shown me.

But the better outlook is assured by the opening of the eyes of "the blind sighted people," as the general public have been felicitously called. Indications are many that the remarkable utterance of Helen Keller:

There is no law on the statute-books compelling people to move up closer on the bench of life to make room for a blind brother; but there is a divine law written on the hearts of men constraining them to make a place for him, not only because he is unfortunate,

but also because it is his right as a human being to share God's greatest gift, the privilege of man to go forth unto his work,

is being heard, and the world is going more and more to exercise its intellect in helping to discover ways in which the sightless can be employed, working in their own communities, along with seeing people, a part of their own home society. I was touched by the hopeful spirit of that graduate who said in his commencement address in 1907 that he thought the people in general were coming to realize that a piano is tuned not by the use of the eyes but by the exercise of the sense of hearing, and therein he saw his opportunity. I was pleased to hear not long ago the comparison instituted by a patron of one of our music stores. While I was in the store she came in and paid a bill for tuning her piano. The clerk went for a receipt and while he was gone the lady said to her companion, "This is the last time they can send their man to me. Why, the time before I had a blind man and he went over the piano and tuned it thoroly, and I never had such a good job done on it."

Teachers of ordinary public schools need to be enlightened, too, that they may come to understand that the problem of educating the blind youth may be, as it should be, a charge not only of the special institutional schools but of the home schools also. Institutionalized children lack the social touch that renders them agreeable members of society, we are told, and thus, too, their success at remunerative activities is interfered with. Some of this institutionalizing may be overcome if the child at home on vacation is invited and urged to attend the home day school the few days he may be at home while it is in session, and if the children of the community are influenced to seek out in the long vacation play time and draw into their play these boys and girls who need so much this sort of attention. They must be sought out, for timidity and reserve are accentuated in them. But the effort will pay in the improvement of the ones thus sought out and in the reflex influence of deeds of unselfish kindness done to very needy ones.

In another particular is enlightenment sadly needed, yet I approach this phase of the subject with some reluctance and speak almost with bated breath. Enlightened teachers and public may help to the prevention of much blindness. Preventable blindness seems to be increasing. But the outlook is that an enlightened public sentiment is about to be aroused that will make for better things. A superintendent of one of Ohio's state hospitals for the treatment of the sick of mind said to me that if certain precautions of a physical kind might legally be taken, within fifty years an insane person would be such a curiosity that people might be willing to travel hundreds of miles to see one; while today Ohio has nearly 12,000 in her state hospitals alone. Organizations of women and men touched by the sense of responsibility for the common welfare and horrified at the disclosures of Dr. F. Park Lewis' committee of the American Medical Association, and state commissions in a half-dozen or more commonwealths are striving to awake the public to the fact that much blindness is unnecessary, preventable, and should not be allowed. A blind

youth should be more of a curiosity than he is. This will come about with greater knowledge. Chary as I, superintendent of a state school and possessed of knowledge of causes of blindness beyond other teachers, should be in the matter of publication, it appears to be a duty owed to other members of the profession of teaching to advise them of the awful fact that 40 per cent. or more of the blindness in youth is due to the social sin of one or the other of the parents, usually the father (sometimes of the grandparents). An educational organization affiliated to our parent National Education Association—the Society for the Scientific Study of Education—has, in the *Eighth Yearbook*, written by Professor Henderson, contributed notably to the cause of purity and progress. If its publication is widely enough read and the recommendations are followed, social vice is bound to decrease. Tho I am not one who believes that virtue can be taught—it must be the product of a spiritual activity rather than an intellectual—yet I believe that the way of virtue may be taught, and the guides of youth may so influence choices by inspiration, by warning, by precept, by example, by restraint, and even by compulsion that “the primrose path of dalliance” may be avoided and the way of clean living be trod, to the advantage of the individual and the race.

Prevention of all unnecessary blindness is a public duty. Education of all children, including the sightless, is a public function. Ignorance and false sympathy of parents, or of the public, must not be permitted to hinder such well-rounded development as can be secured to these in whose interest I speak. And being trained, the youth must have his chance.

I am an advocate. I appeal for my clients that so far as possible those who hear these words or read them shall in the future lend a helping hand to open for our sightless young men and women the way to honorable employment. Teachers are the best hope of a better social order. How much they can do! How much they are called on to do! And I suggest the additional service to the state and to society that in any community where these who live in physical night may be, the teacher shall search out for such opportunities to become useful members of society. This is the true philanthropy.

OPEN-AIR SCHOOLS

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Speaking to an assembly, every member of which has an intimate knowledge of the conditions and requirements of school children, it is unnecessary to point out the advisability of making special provision for the delicate child—the weakling—who attends school only between the intervals of illness, or if not actually compelled to be away from school, is incapable of exertion, either mental or physical, necessary to keep up with his comrades. It is true, of course, that some delicate children are exceptionally intelligent, and do not therefore lose ground, but speaking generally, children in poor health are

backward, not on account of defective intelligence, but rather from impaired vitality arising from a variety of causes, such as underfeeding, organic weakness, or incipient disease. For such physically unfit children, a new type of school has been established by Germany and England during the past five years. This is the open-air school, whose aim, briefly, is to teach and cure. A very thoro system of school medical inspection has been carried on in most parts of the German Empire. This has enabled educational authorities to examine and sift very carefully the large numbers of school children who become of school age.

By means of a system by which every school child is provided with a health card, a regular and comprehensive record of the bodily condition of a child is kept during the whole of his or her school life.

In course of time, it was found that there was a certain class of children who were suffering from disease and unable to attend school, and it is probable that from 3 to 5 per cent. of all school children in large cities belong to this class. So Germany established these open-air schools. From the hygienic standpoint the children must be brought out into the open air, must be fed regularly and properly, given plenty of play and rest, and treated with fresh-air exercises, sunshine, and baths.

The children selected by the school doctor were those likely to benefit by attending an open-air school and were in general anaemic or debilitated. None suffering from acute or infectious diseases were chosen. Before entering the school, their teeth should be examined and put in order, otherwise they will not derive the proper benefit from their food. About 90 per cent. of our schoolchildren suffer from defective teeth, which are also responsible for many other ailments, much unnecessary suffering, and lowered vitality.

The first school in Germany was established at Charlottenberg, in a pine grove about three miles from the town. It covers about five acres. The buildings, among which are a number of open-air sheds, are distributed in a suitable manner. This school has an attendance of about two hundred and fifty children.

They come in the morning about 8:30 and remain until evening. They receive four meals a day, and are compelled to sleep two hours after the midday meal. They are provided with rugs for chilly weather, and capes for rainy weather, and whenever it is possible they are kept in the open or under an open shed. The work of the school doctor consists in keeping a careful watch on the bodily condition of the children. He weighs them, constantly examines the heart and lungs, the state of the blood, and the general condition with regard to color, and muscular and flesh development. Plenty of mineral, spray, and sun baths are given.

The first physical results carried out four years ago, after the first experiment with one hundred children for three months, were remarkable: 23 per cent. were cured and 45 per cent. greatly improved.

The second experiment, lasting five months, gave still higher percentages

of cures and improvements. Nearly half the anaemic cases were cured and about one-third of the ^mscrofula cases. More than half the consumptive cases showed great improvement and cases of heart trouble were very much diminished.

The increase in weight per child was about six or seven pounds, or about one-half pound per week per child.

The children's bodies also became hardened to some extent by their constant sojourn in the open air so that even in wet and cold weather they scarcely ever suffered from colds.

This school is now carried on from April up to Christmas with the snow on the ground.

The educational results were no less remarkable. All the teachers noticed an increase of mental attention and alertness. Three months after the children returned to the ordinary town schools, reports were sent in that in all cases they were able to resume and continue their work in a normal manner. In some cases their progress was even greater than before they had attended the open-air school. These educational results were brought about by small classes of twenty-five children to one teacher, by a reduction of the hours of formal instruction, and generally by bringing the instruction into touch with outdoor conditions and thus stimulating the children's interest.

These are most significant results and raise the question as to whether the instruction in the elementary schools could not be given in a different manner, and with greater benefit to the children's health and a better utilization of the large sums of money expended on elementary education.

If such results can be obtained with debilitated children taken out into the open, their hours of instruction reduced, the number of teachers increased, and their health looked after, what could we not hope to attain with normal children under similar conditions?

The behavior, too, of the children, showed great improvement, especially in regard to order, cleanliness, self-help, punctuality, good temper, and kindly disposition—this owing to their isolation from street life, to the constant intercourse with teachers outside the formal hours of instruction, and to their sharing in the daily tasks of the community.

The recognized hours of attendance at the open-air school were from 9:00 A. M. to 7:00 P. M. Breakfast was served at 9:00; lessons occupied time until 12:30; dinner at 1:00 was followed by two hours of perfect rest, the children lying either in lounge chairs or on rugs on the ground. Absolute silence was enforced, and sleep encouraged. Lessons again from 3:30 to 5:00—tea time—and from 5:00 to 7:00 the time was spent in gardening, games, or any interesting occupation.

This long day with the children gave opportunity for the development of that sense of corporate life and responsibility so essential to the making of a good citizen.

The daily round of domestic duties required the abnegation of self so

necessary to the well-being of a community. This necessitated a good deal of labor and devotion on the part of the teachers, but they seemed very enthusiastic and did not begrudge the extra time.

The leading principle of the school seemed to be frequent changes from work to play, reading, singing, and rest, with constant stimulation of interest.

In America we have now, as a part of our regular school curriculum, school excursions, school camps, vacation schools, country schools, school gardens, etc. Each has its own particular line and scope, but we must not confound open-air schools with these. The open-air school with its scheme of three to six or more months of continuous outdoor instruction together with its careful attention to every detail of nutrition and health is by far the most systematic and comprehensive form of outdoor school life, altho it may lack some opportunities of work and interest afforded by other forms of open-air education.

The movement, of course, contains nothing new. The principles underlying it have been preached by Emerson, Herbert, Froebel, Luther, Pestalozzi, Comenius, Bacon, Rousseau, and many others in modern times. Comenius said, "As far as possible, men are to be taught to become wise, not by books, but by the heavens, the earth, oaks and beeches; that is, they must learn and examine the things themselves, and not the testimony and observations of others about the things."

Now, why do we want as much outdoor instruction as we can get out of our present school system? Because our children on leaving school should be bright, alert, resourceful, in touch with actual conditions, with some power of initiative and plenty of brain hunger. We can attain this best by abandoning as far as possible the old methods of instruction by words and basing as much of the instruction as possible upon appeals to sight, sound, touch, and movement, bearing in mind that the areas of the brain which control muscular development develop much earlier than the higher brain centers. So we must clear spaces in our educational area where children can actually live thru and act simple human activities. Just as we provide laboratories for science instruction, so must we provide outdoor sites and activities as a necessary complement to indoor or desk instruction.

As carried on at present, European open-air schools are rather open-air recovery schools. Later, without any doubt, we should establish open-air schools for healthy children. If such results can be secured with debilitated and sick children by open-air school treatment, what may we not attain with healthy children under similar conditions and methods?

Now for the curriculum of the open-air schools. For health purposes, the ordinary formal instruction must be reduced one-half and the children given two hours of complete rest. This loss in length of formal instruction can be met by small classes not exceeding twenty-five, and by teaching many of the subjects in the open in actual touch with actual conditions. Briefly speaking, most of the morning instruction should be devoted principally to reading,

writing, some drawing, and a little of the principles of arithmetic. The length of the lessons should not exceed thirty-five or, at the most, forty minutes. The rest of the morning and a great part of the afternoon as a rule should be devoted to the practical teaching of history, geography, nature-study, practical arithmetic, and so forth. Here every possible activity should be brought into play to aid the instruction. Digging, gardening, acting, singing, drawing, planning, measuring, and building, the fashioning of tools, apparatus, pottery, care of animals, order, cleanliness, bodily fitness, and sharing in the work of the community should be among their daily tasks. Teachers will arrange the subjects to suit their individual schools, but care must be taken to carry on very thoroly the formal instruction in reading, writing, some drawing, and some principles of arithmetic.

It is important to remember that an open-air school is not only a physical, but also an educational, institution, and that both aspects of the school are equally important. The children's health will of course improve, owing to the regular feeding and improved surroundings, but unless care is exercised, the educational aim will be neglected.

In arithmetic, the children should be provided with tape measures and use them as much as possible. They should base their sums on actual outdoor measurements, made by themselves, and not merely manipulate abstract figures. The whole of the surroundings and daily life of the school can be drawn upon for suitable examples.

Geography should be taught as much as possible in the open. Relief maps may be made to scale in sand and the configuration of the surrounding country explained. An immense amount of geographical instruction can be imparted with the help of a rivulet or a stream.

In teaching history, the children should be taught to act historical episodes, as much as possible, using their own words. In England in one school I saw the children begin by living the life of the prehistoric people. They were cave dwellers, and prepared and used the primitive implements in the stone age. They became lake dwellers, fished in the most primitive fashion, and made the rough pottery of the period and baked it in the sun. Experimenting with firesticks and flint to produce fire were fascinating occupations. They emerged from these days before history to more modern times, became worshipers in a Druid temple, discovered that, for purposes of protection, it was advisable to form a village community and that for purposes of government a chief must be chosen. The children constructed the necessary buildings for each period, including cave, lake dwelling, wigwams, log huts, and Norman keep. All but the last-named were large enough for the children to live in.

Nature-study, as a matter of course, was an important feature in the school. The truest means of knowing Nature is to live with her, and in the open-air school this opportunity of being continuously in close communion with Nature was given. The children were bathed in sunlight, fanned by the summer breezes, their nostrils gratified by the perfume of many blossoms,

their ears charmed by bird songs, and nature-study became a spontaneous action, not a time-table lesson. The flowers, shrubs, and trees became familiar friends. The kitchen garden, overrun with weeds of three or four years' growth, gave a splendid field of observation and collection until stern necessity demanded the uprooting of these misplaced plants and the substitution of more useful specimens intended on a future date for home consumption. This same kitchen garden gave material for nature-study of a rather unwelcome kind, for the caterpillars, flies, worms, and beetles which attacked part of the crop, altho interesting as studies, rather upset the domestic calculations. The life history of some of these and other creatures from the garden was carefully followed from specimens collected and kept in the school museum, which was only a glass porchway leading from the house into the grounds.

Frequent short tours of discovery were made in the neighborhood which resulted in establishing homes for various frogs, toads, dragon fly, scorpions, and other forms of pond life. In these expeditions, whether for the purpose of nature-study or general observation, the children were provided with a hectographed map of the district to be covered and, with the sun-dial and compass, found their way, being only assisted in case of dire necessity.

Gardening, cane weaving, and clay modeling were selected as the most suitable forms of manual work; and one need not enlarge upon the value of singing and physical exercises in the open.

The chief aim was for the right use of the abundant and varied material by which they were surrounded, so that the children might receive the greatest possible good, physically, mentally, and morally.

In this school in England, the teacher and children took charge of the caretaker's baby, with the thought that what was good for delicate school children might benefit a sickly infant, so to the softening influence of nature was added the humanizing influence of a little child. The first week or two the baby was too ill for the children to do more than take turns in watching him, noting carefully the remedies applied for his relief. Afterward the elder children were taught how to bathe, dress, and generally care for an infant of tender age, and especially was impressed upon them the necessity for proper feeding. If every man and woman understood the duty due to their children, there would certainly be a greater number of useful citizens in our country. At all events, the older children in the school learned that pork, peas, pudding, and pickles do not form a suitable diet for children up to twelve months old.

When the children return to the ordinary school, they should not be judged entirely by the standard generally applied to school children taught by book methods. Increased mental alertness and receptiveness, and greater application and resourcefulness should be taken into account in estimating their progress.

Much time, work, and patience will be necessary before we attain definite

methods and conditions in open-air teaching on a large and comprehensive scale. Highly qualified and resourceful teachers will be required. The work is also exhausting at the beginning, as the teachers are with the children during the whole of the day.

A few points may be mentioned as likely to arise out of open-air teaching. One is a question of size of classes. Open-air school teaching cannot be carried on with large classes: first, because of difficulty in supervising large classes in the open; second, because the children's interest is awakened to such an extent that questions pour forth in a ceaseless flood. It is a most important part of a teacher's work to answer children's questions and to stimulate them by every means in her power, and this is possible only in small classes. Then, too, much of the instruction is based on sight, movement, touch, and various activities, and is therefore equally impossible in large classes.

German and English authorities believe that when more open-air schools have been established, it would be of the greatest benefit to the ordinary school to bring about a constant interchange of teachers between the two types of school. There might be a constant flow of teachers from the ordinary school thru the open-air school and back to the ordinary school. In this way many of the open-air methods would be made known and become popular with the ordinary school. Financially there is no doubt that the open-air school movement will exercise an influence on the position of future school buildings. For hygienic reasons we shall cease to build schools in congested areas, where playgrounds and open, quiet surroundings are impossible. We shall try to build such schools around parks and open spaces, and see if the transit difficulties can be surmounted by the laying-down of car lines not only in regard to the conveyance of adults but also in regard to the position of the schools and conveyance of school children.

The tendency in the construction of school buildings in the near future should be to expend less on bricks and mortar and more on playgrounds and hygienic and educational apparatus.

At the present time we seem to have only two alternatives in the erection of elementary school buildings: either we must put up fine buildings, great temples of learning, which will show to future generations our zeal in education and our taste in architecture, or, anticipating the great coming changes in education and the probable shifting of the population in large cities, we must frankly abandon this idea and build simple buildings calculated to last about thirty years, but fulfilling all requirements of course in regard to heating, lighting, ventilation, drainage, aesthetic appearance, and so forth. Many school buildings of the future might very well be built with a ground floor only, or one story high, with an open-covered and well-lighted veranda, if possible built on to each schoolroom.

It is an error to assume that children in poor, congested areas should have a school at their door. Their school should face a park or open space or be

on the outskirts of a city. The transit difficulty could be solved by choosing the site with reference to the street cars, or putting the car lines down with reference to the schools. Cars taking full loads to the heart of the town in the morning and returning empty could be utilized for school transit; conversely in the evening. School children might ride free of charge in municipal cars.

*REPORT OF COMMITTEE ON BOOKS AND TESTS PERTAINING
TO THE STUDY OF EXCEPTIONAL AND MENTALLY
DEFICIENT CHILDREN*

Your committee, consisting of the undersigned, appointed by the president of the Department of Special Education, during the Denver meetings, to prepare a list of the best books and appropriate workable apparatus and tests pertaining to the work of educating exceptional children, beg to submit the following report which is somewhat incomplete on account of limited time for preparation and space for publication.

APPARATUS AND TESTS

To select workable apparatus and suggest tests for use in determining grades and degrees of abnormality in children, which, in the hands of those devoid of technical training, will give promise of yielding serviceable and fairly accurate working data, is obviously difficult, if not wholly impossible. Indeed, to the minds of the committee, it is quite problematical whether those uninitiated ought to attempt independently any more extended use of apparatus or tests than to determine some of the relatively obvious sensory deficiencies, nervous disturbances, or mental abnormalities. In dealing with such a complex, compactly organized being as a child, a little knowledge is not only dangerous, but curative treatment in the hands of the unskilled is ordinarily fraught with grave consequences. Really, about as much as an ordinary teacher or supervisor may do with impunity, and practicable results, is to examine for some of the grosser eye and ear defects, look for symptoms of nervous disorganization or disintegration, make uncomplicated fatigue tests, secure records of the children's height and weight as indices of growth and relative maturity, and employ some rough tests for grading extreme degrees of subnormality.

Vision.—It seems clear to the committee that a teacher should undertake to assume nothing beyond an advisory interest in a child's visual organs. In no other regard, perhaps, does quackery lead to such fatal results as when children are fitted with glasses wholly unsuited to the nature of their ocular defects. Often they are compelled to go about suffering a martyrdom, which frequently permanently destroys the efficiency of vision, or worse, leads to nervous collapse and a breaking of the entire physical organism. Still it must not be forgotten that neglected eye defects oftentimes lead to a similar result. A teacher should consequently be able to detect in the gross serious

deficiencies in the functioning of the visual organs, and interest, direct, and urge parents in matters leading to their correction

One of the most common tests of vision is for deficiencies as regards the recognition of distant objects, or of writing on a distant blackboard, or of printed matter in a book held at least twelve inches from the eyes.

The standard test for distant vision is what is known as the Snellen Letter or the Snellen Illiterate Test. Before attempting this test, or indeed any of the vision tests to be suggested below, the teacher should familiarize himself thoroly with the directions given in any standard work on the eye. (Hart-ridge, *Refraction*, G. Churchill & Co., London, 1903, is perhaps as good as any.)

In use with mentally defective children the illiterate test-card in general has been found to yield the most satisfactory results. With one of the eyes covered, the child stands at a fixed distance of six meters (20 ft.) from the eye chart and turns the outline "E," which he holds in his hand, so that its general direction will correspond with that of the "E" on the card to which the examiner points. The examiner begins at the top of the test-card and proceeds downward as far as the child's vision will permit. The number of the line reached will thus constitute the denominator of a fraction whose numerator is six (the standard distance), and this fraction roughly is the index of the visual acuity of the eye in question. A visual acuity of less than two-thirds, even in the absence of other symptoms, should cause a teacher to report to parents that the eyes of their children ought to receive the attention of an oculist.

Far-sightedness (Hypermetropia), that is, difficulty in seeing objects or reading matter at a distance less than twelve inches from either eye, may be advantageously tested, in a rough way, by determining the nearest point at which the small print of an ordinary newspaper begins to blur. Unless the print stands out clearly not farther away than twelve inches, the case should be reported to the parents, and in turn to an oculist. Children generally will be able to see the print clearly at a distance from six to eight inches from the eye. (For ill effects arising from far-sightedness, the reader is referred to Dr. Swift's chapter on "Reflex Neurosis" in *The Mind in the Making*, Scribners, 1908).

Another characteristic and extremely common visual defect arises from an asymmetry in the form of the eyeball, and is known as astigmatism. To detect the type and degree of astigmatic vision, however, is always difficult even for an oculist, so obviously a teacher's intimation of its presence in a child should come indirectly. If the child complains of headaches, if he is nervous or restless, if he appears to be working under a strain or tension, if he is dull and listless, and indifferent to study, it is always wise to have the eyes examined by a competent oculist, to determine whether there be not present some grave visual defect. But charts and other direct devices for testing astigmatism, in the opinion of the committee, are safe only in the hands of those who have been carefully trained in their use. (See any good text on refraction.)

Hearing.—Devices and methods for testing auditory acuity have been projected in considerable numbers. Among mechanical devices the watch test, because of its wide use, must be given foremost rank. The acuity of the ear in question is determined, with this method, by the distance that the tick of the watch can be heard, as compared with normal ears. To take the place of the watch, an Austrian professor (Pullitzer) devised an instrument consisting of a small hammer falling upon a metallic rod from a constant height. Then to eliminate the factors arising from extraneous noises due to the extreme distances called for in these two methods, and the errors due to sound reflection, McCallie (see *Training School*, 1908) places the Pullitzer instrument (or a modification of it) in a sound-proof box, and conducts the sound to the ear thru rubber tubes, the quantity of sound reaching the ear being regulated by varying the dimensions of the apertures leading into the tubes. Space forbids a discussion of the merits or deficiencies of any of the above. Suffice to say they give relative results only, and such, indeed, as a teacher might ordinarily detect without the use of any apparatus.

In Germany aurists generally employ for testing hearing an elaborated scheme of tuning forks, sometimes quantitatively graduated, often not. Professor Seashore, of the University of Iowa, has on the market an electrical instrument, wherein a sound caused by the opening and closing of an electric circuit is transmitted to the ear thru an ordinary small telephone receiver. This is perhaps the most practical instrument extant, in that a large amount of technical skill and knowledge are not required for its manipulation and use. Indeed any intelligent teacher may use it to test hearing with assurance of getting fairly good results. (For information regarding the use of this instrument and a description of its mechanism, see *University of Iowa Studies*, 1899, p. 55.)

Perhaps after all about as serviceable a method as any to employ in testing hearing, from the viewpoint of the average teacher—and this is applicable to children of all grades of intelligence—is what is commonly designated as the whisper test. By this method the child is stationed at some ten to twenty feet from the examiner (depending upon external conditions) with one of his ears turned in the examiner's direction. The numerals from one to twenty are then spoken to the child in a whispered voice, and he is requested to repeat what he hears. A child who does not hear, with either ear, a fairly loudly whispered numeral at a distance of ten feet, should be referred to the local aurist, or, in the absence of such, to the family physician, for diagnosis and subsequent treatment.

The tests and methods just outlined by no means include all. They are, however, representative. In addition there have been devised some complicated apparatus, for stating hearing acuity in absolutely quantitative units, but these are unserviceable for ordinary school purposes. (For a history of these see Bruner, *The Hearing of Primitive Peoples*, Science Press, 1908, p. 55.)

In the case of both eyes and ears, it ought to be added, teachers should be constantly on the alert also for evidences of local irritations, such as inflamed or granulated lids, eye fatigue, or pustulating ears and earaches.

Adenoids.—Altho there is no doubt but that the baneful effects of enlarged adenoid tissues are frequently exaggerated, adenoids do very commonly interfere seriously with school work. Owing to their location, too, unless quite large, they will often escape the detection of a physician's routine examination, and hence an infallible rule for their discovery by the teacher is lacking. Is the child a habitual mouth breather? Can he breathe thru his nose when told to hold his mouth shut? Is his nose particularly broad between the eyes? Does his voice have a nasal tone? With these answered in the affirmative, the teacher is justified in directing parents to seek the advice of a physician. Chisel-shaped teeth, mental dullness, nervousness, or defective hearing are also frequently the accompaniments of adenoids.

Nervousness.—Professor Kirkpatrick, in a paper read before the Department of Physical Education of the National Education Association in 1905 (pp. 763, 764) calls attention especially to this physical condition of some children which so often retards their school progress. His statement is as follows:

In general, nervousness is either a state of low nervous tone, or of nervous irritability, but it is most often both at the same time. Excess of nervous energy in children of the motor type is a form of pseudo-nervousness that is almost indistinguishable from the abnormal irritability of the really nervous child. The chief differences are that the really nervous child makes more irregular and unco-ordinated movements, responds excessively to slight stimuli given suddenly, is more likely to become angry and to cry on slight provocation, and these symptoms are more marked after a period of physical or mental exercise.

Nervous weakness may not be evident to ordinary observation, except when the child is subjected to an unusual or prolonged strain, when it is often shown in a sudden weakening and loss of self-control. The best test for deficiency of nervous force is obtained by following Warner's suggestions for observation of the nervous hand. Every teacher should look at the picture of the nervous hand which he gives in his book, *The Study of Children*, showing a peculiar drooping curve of the wrist, with the third finger slightly separated from the others and the middle joint raised above them. After an image of this type of hand has been gained, it may best be observed by asking the children to stand and hold their hands out in front of them, palms down. The significance of this test, and the uncertainty of a teacher's judgment based on ordinary observation, are indicated by the following case of twins. One was restless, which was taken as a sign of nervousness, while the other, a steady, quiet worker, gave no such signs, yet he had a nervous hand. The teacher was surprised to hear from the mother of the children that the quiet boy "went all to pieces" when he got home at night, while the other one showed no signs of nervousness at home. Doubtless close observation for nervous hands would often enable teachers to guard against the sudden "going to pieces" of quiet, studious children, which sometimes occurs, much to the surprise of the teacher and the disturbance of the school.

If, when the hands are held out in front, the fingers are straight but the thumbs drooping, a less degree of nervous weakness (perhaps due to temporary fatigue) is indicated. Other signs of lack of nervous tone and balance, shown in the same test, are over, under, or unequal elevation of the arms, or a throwing-forward of the abdomen, especially when the pupil is asked to stand erect and hold his arms horizontally. Further evidence of lack

of balance and good muscular control may be obtained by asking the children to close their eyes and hold their arms out horizontally on each side, then observe for swaying and lack of symmetry of the arms.

One of my students recently used these tests in observing several hundred children, and, with a few exceptions, all that had shown signs of nervousness were detected by these tests, while a number manifested some of these signs of nervousness in whom it had not previously been noticed.

Other enlightening tests are to ask children to sit perfectly still without moving a muscle for a minute or two, or to place their hands on the desk, and keeping all but the forefingers on the desk, tap as rapidly as possible for a minute or two without stopping. Manual work and games of various kinds also furnish good opportunities for observing nervous defects, irregularity or lack of control of movement usually indicating nervousness.

Tests of intellectual capacity.—Tests of mental deficiency are chiefly useful in the hands of the skilled experimenter. No sets of tests have been devised which will give a categorical answer as to the mental status of any individual. In nearly every instance in which they are used, they need to be interpreted. Teachers of experience in institutions for the feeble-minded, for example, usually learn, after general observation of the appearance and behavior of many patients, to tell with a fair degree of accuracy the grade of deficiency. Such tests as are now used should enable such an experienced person to determine more promptly and certainly the child's mental level because they put the patient and observer into such experimental conditions as weeks of general observation might not bring about. But even so, they need to be supplemented by much experience before certain cases can be successfully classified.

What applies to a greater or less extent to most cases of feeble-mindedness is even more true of the lesser degrees or grades of deficiency, backwardness, and nervousness. Such tests as the "nerve signs" of Warner, referred to above, designed to determine the nervous condition of pupils, will be of aid to the person who has taken the pains to become experienced in the observation of such cases, and who can bring to bear some fund of general experience to supplement and interpret the results of a given test, and this experience is by no means beyond the reach of the ordinary grade teacher if she will devote some attention to the observation of such cases in her classes. Taken by themselves, however, they often mislead the experienced observer.

Two sets of tests of general capacity have been proposed within the last few years and have been found to be of considerable value. They are those of Professor Sante de Sanctis, of the University of Rome, and of Binet and Simon, of the Sorbonne in Paris. As they are, as yet, not accessible to the ordinary teacher, the committee gives below a translation of them prepared by Dr. Henry H. Goddard, and published in the *Training School* (November and December, 1908).

THE GRADING OF BACKWARD CHILDREN

BY HENRY H. GODDARD

(Training School, November, 1908)

Dr. De Sanctis has six tests so graduated and arranged that the grade of the child is indicated by that test beyond which he cannot go.

DE SANCTIS' TESTS

1. Give me a ball. (The experimenter notes the time it takes the child to respond and, when the response is obtained, covers the balls with a screen.)
2. Which is the ball you gave me? (Time and cover as before.)
3. Do you see this piece of wood (cube)? Show me all that are like it in that group. (Time and screen as before.)
4. See this card. Mark every figure that you can find on the card that is like this piece of wood (holding a cube before him). (Time, note errors and omissions, and replace the screen.)
5. Here are blocks of wood just like those you saw on the card.
 - a) Look carefully and tell me how many there are. (Child is allowed to count.)
 - b) Which of them is the largest?
 - c) Which one is farthest from you? (Note the time, errors, and omissions.) (Replace screen.)
6. (a) Are large things heavier or lighter than small things?
- b) How does it happen that sometimes small things are heavier than large things?
- c) Do distant things look larger or smaller than near ones?
- d) Do they only appear smaller or are they smaller?

The apparatus for these tests is as follows:

1st Test. Five balls of five different colors, red, green, blue, yellow, and violet or purple. They should not be too small and may be of any convenient material. We use worsted balls of about two inches diameter. Instead of a screen, we cover the balls with a pasteboard box of suitable size.

2d Test. The box is removed so the child can see and pick up or point to a ball.

3d Test. The group of blocks consists of five cubes, three cones or pyramids, and two parallelepipeds. The cubes are about an inch and a half on a side; the four-sided pyramids about the same base and two inches high; the parallelepipeds two and a half, by one, by a half-inch.

4th Test. The card has ten rows of fourteen figures each, the figures being a triangle, an oblong, and a square placed at random. The figures are about a half-inch base, the oblong is half that height, and the triangle is the altitude of the square.

5th Test. There are twelve cubes varying in size from an inch to three inches.

In giving the tests see that the child is comfortable and happy, not fatigued, frightened, or ill. Make a pleasant game of the whole procedure. Rest a bit after each test.

Use words that the child understands. The question may be repeated three times. If then he cannot answer, stop the examination. You have reached his limit.

If you are in doubt the whole can be repeated after a few days.

Dr. De Sanctis claims that by these tests one discovers directly:

1. Capacity of adaptation to experience, which comprises adaptation to work, and certain conditions of attention, or perception, and of will.
2. Immediate memory of colors.
3. Capacity for recognizing colors and forms, and the recognition in a way to establish the identity of a plane figure with a solid.
4. The tenacity or duration of attention.
5. The capacity of enumerating objects and of judging of their quantity, size, and distance.

6. The capacity to reason about objects no longer present to the senses, and on the general concepts which comprise not only attention and imagination but also the faculty of generalization and abstraction.

7. The rapidity of perceiving, of reflection, and of acting.

Classification:

a) Intellectual defect of a very high degree is established when the subject cannot go beyond the second question.

b) Moderate degree when he cannot go beyond the fourth question, but does the fifth with great difficulty and many errors.

c) Light degree when he does fifth but not sixth.

A child who does all with normal rapidity is not defective.

Dr. De Sanctis says that the tests give excellent results with all children from seven to sixteen years of age. Dr. Decroly, of Brussels, finds it agrees well with his own institution classification. It must be added that apparently the effect of training is not fully taken into account, and a child who has had rather good training may pass Test 6 and still be feeble-minded. However, it would seem that the teacher who finds a child who passes all the tests "with normal rapidity" may safely consider the possibility of that child going back eventually to the regular grades. A child who does not do the sixth is feeble-minded, although of light degree.

Any teacher using these tests should keep a careful record of the name, age, sex, training, etc., of each child together with the date of testing.

THE BINET AND SIMON TESTS OF INTELLECTUAL CAPACITY

(See *Training School*, December, 1908)

The Binet and Simon tests are more extensive than those of De Sanctis. Consequently they admit of a closer classification and I apprehend they will be more satisfactory to the teacher. They certainly reveal much more of the child's ability or its lack than do the tests of De Sanctis. Like his, however, they show the actual intellectual condition of the child at the time. They tell nothing about his past and they make no prediction as to his future.

The teacher who measures a child by this standard simply discovers where he stands at the present moment. She knows whether to adapt her methods to a mildly deficient, or a very dull, child. Adapting her methods according to this knowledge she will discover in due time how improvable he is.

The tests number thirty, but that is not as serious as it sounds when we remember that they begin with things suitable for infantile intelligence and end with those suitable for a normal child. The result is that in any given case one starts with the sixth, or tenth, or fifteenth test, and perhaps ends with the tenth, fifteenth, or twenty-second.

The required apparatus is also comparatively simple and easily prepared.

The following is the list of tests with a brief statement of what they are intended to show and the method of applying. Following the list will be found details of apparatus where such are needed:

Tests:

1. Co-ordination of movement of eye and head. Use a lighted match, moving it about in front of the eyes. Note if child is able to follow the match with his eyes.

2. Prehension provoked by tactile excitation. One seeks the co-ordination between a tactile sensation of the hand and the movement of grasping and carrying to the mouth. We use a small cube, laying it in child's hand.

3. Prehension provoked by visual stimulus; sight of an object and its prehension. Use cylinder and string. Hold in front of child's face within easy reach and note if he reaches for it, grasps it, and carries it to mouth.

4. Recognition of food. Can he tell by sight what is food and what is not? Use wood and candy or chocolate.

5. Search for food complicated by a little mechanical difficulty. This test can put in relief a rudiment of memory. Wrap candy in paper in sight of child. See if he removes paper, eats candy, eats paper and all, or does nothing.

6. Execution of simple orders and imitation of simple gestures. This test involves diverse motor co-ordination and certain association between movements and the understanding of the significance of certain gestures. (1) Does he shake hands? (2) Be seated. (3) Pick up from floor. (4) Send away. (5) Call back. (a) Clap hands; (b) put hands in air; (c) on shoulders; (d) behind back; (e) turn one hand around the other; (f) rise on toes.

7. Verbal recognition of objects. (Association between objects and their names.) Where is head, hair, eyes, feet, hands, nose, ears, mouth, cheek, eyebrow, heart? Part 2: String, cup, and key on the table. "Give me the key," etc. Use suggestibility: (a) "Show me the button."

8. Verbal recognition of objects. (Same as 7, only a little more difficult.) Use colored pictures: "Where is the window? etc." Suggestibility: (b) "Where is the Patapoun?" "Where is the 'Nitchoo'?"

9. Naming of designated objects. (The reverse of 7 and 8.) A second colored picture. "What is that?" (pointing to various parts of the picture).

10. Immediate comparison of two lines of various lengths. "Which is the longer line?" (three cards; repeated). Use in this connection "Suggestibility (c)."

11. Repetition of three figures. Test of immediate memory and voluntary attention. Say to child "Say this after me, 4-7-3." (Four, seven, three.)

12. Comparison of two weights. (Test of attention, of comparison, and of muscular sense). Use 6- and 24-gram blocks, then 12 and 30, then 6 and 30.

13. Suggestibility. Record here the results obtained under "Suggestibility" in tests 7, 8, and 10.

14. Verbal definition of known objects. What is a spoon, house, dog, mamma?

15. Repetition of phrases of fifteen words. Repeat each number entire, and require child to repeat it after you. Note his errors.

1) Boys work on the farm; girls work in the house; boys and girls go to school.

2) In the summer we have fine weather; in the winter the snow falls.

3) My cousin has been bad; she does not work; she will be scolded.

4) The chestnut tree in the garden throws upon the ground the shade of its new leaves.

5) The horse draws the carriage; the road ascends and the carriage is heavy.

6) The clock has struck one; the house is silent; the cat sleeps in the shade.

7) It is not necessary to say all that one thinks but it is necessary to think all that one says.

8) We should not confound the spirit of criticism with the spirit of contradiction.

16. Differences between many known objects, as recalled by memory: (1) paper and cloth; (2) butterfly and fly; (3) wood and glass. (It is an exercise in ideation, the notion of difference, and a little of the spirit of observation.)

17. Exercise on the memory of images. (Looks at objects for thirty seconds and then names all he can.) Use prepared card.

18. Designs from memory. (Test of attention, of visual memory, and a little of analysis.) Use prepared card. Expose ten seconds. Have child draw his design on back of record sheet.

19. Immediate repetition of more than three figures. 597, 5328, 41653, 738219 2690315, 85723946. Pronounce the figures in each group distinctly, and not too fast. See if child can say them after you.

20. Resemblances of many known objects represented in memory: (1) milk and snow; (2) mosquito and bee; (3) table, a chair, and a door.

21. Comparison of lengths by means of two series of lines. Use set of cards—"B" and then "C."

22. Placing in order five weights—18, 15,* 12, 9, and 6 grams. (Requires continuous direction of attention, an appreciation of weights, and memory of judgment. Use the wooden cubes.)

23. If 22 has been done rightly, have child close his eyes and take away one of the weights. Require him to tell which one has been taken away, weighing them by hand.

24. Exercise on rhymes. (Requires an abundant vocabulary, suppleness of spirit, spontaneity, and intellectual activity. Rhyme with ball, coy, din, feet, spring, money.)

25. Supplying words for those left out of sentences. The following is Binet's story: The day is fine, the sky is (1) (blue). The sun has quickly dried the linen that the washers have put on the line. The linen is dazzling white and tires one's (2) (eyes). The workers pick up the great sheets; they are as stiff as if they had been (3) (starched). They shake them, holding them by the four (4) (corners). The wind blows them and they flap with a great (5) (noise). Meanwhile the housewife irons the fine linen. She has some flat-irons which she places, one after the other, on the (6) (stove). Little Mary who is taking care of her doll is full of envy. She, too, wants to (7) (iron). But she is not allowed to touch the (8) (irons).

26. Synthesis of three words in the same phrase. Make a sentence of the three words: Paris, bank, fortune.

27. Response to an abstract question:

- 1) What ought one to do when he is sleepy?
- 2) When he is cold?
- 3) When he is detained so that he will be late for school?
- 4) When he sees that it is raining just as he is about to go for a walk?
- 5) When one is tired and a long way from home?
- 6) When one has missed the train?
- 7) When one has broken something that does not belong to him?
- 8) When one sees that a book has been stolen?
- 9) When there is a fire in the house?
- 10) When one has been struck by a playmate who did not do it purposely?
- 11) When one needs good advice?
- 12) What happens when one is lazy and does not wish to work?
- 13) Why is it necessary to save one's money and not spend it all?
- 14) What ought one to do when one has received punishment that he did not deserve?
- 15) What ought one to do before taking part in an important affair?
- 16) What should one do to get a watch that he wants at a store?
- 17) What should one do when someone has offended him and comes and asks pardon?
- 18) What should one do when asked his opinion of someone whom he knows only a

little?

19) What happens when two persons discuss a question without understanding the words?

20) What should you do when a person always contradicts you, no matter what you say?

21) Why ought one to judge a person more by his acts than by his words?

22) Why does one excuse a wrong act committed without anger?

23) Why is it better to persevere in what one has begun than to give it up to try something new?

24) Why should one not taunt a person of the service one has done him?

25) What ought one to do, who has done an irreparable wrong?

28. Interchange the hands of a clock for (1) the hour 6:20 and (2) 2:56. (Child must not see a watch or clock. It is a test of imaging power.)

29. "Cutting." (Test of voluntary attention, of visual imagination, of reason.) Fold and cut the paper before the eyes of the child, but do not unfold until child has answered or failed to answer.

30. Definition of abstract terms: What is the difference between (1) esteem and friendship; (2) remorse and chagrin?

Notes and Suggestions for Using the Tests:

It is well at first to begin at the beginning in order to see how children react to the easy tests but the teacher will quickly learn that she can begin well along in the list and hit closely the child's grade.

Make the examination interesting to the child by talking to him, being careful only that one does not tell him what to do in those tests where the doing is the test itself.

The phrasing will often have to be changed to fit the comprehension of the child. Yet the teacher must not forget that she is not trying to get the child to answer but rather to see if he can answer when he has had a reasonable amount of explanation of what is wanted.

Test 7, Part 2. Any suitable objects may be used. "(a)" is the test of suggestibility. There is no button and the bright child says so at once. The very dull child keeps hunting for it until told to stop. There are all grades.

Test 8. "(b)" is also to test suggestibility. Many children will point to something in answer to these nonsense questions.

Test 10. There are three cards each having a line three centimeters long and one four centimeters. The cards may be interchanged and the test repeated until the teacher is satisfied as to whether the child has the power of comparison. This is a critical test.

"(c)" of this test, is the last "suggestibility." There are three other cards in which the two lines are the same length. When asked which is the longer many children will say one or the other, following the suggestion that in the first cards one was longer.

Test 11. In this and similar tests the figures should of course not be repeated a second time. Explain carefully what you want and if child fails try another group of figures. Repeat the figures distinctly and with equal stress on all.

Test 12. These weights and those of Test 22 are all of the same size. Ours are cubes about an inch and three-quarters on a side. The smallest is 6 grams, the others 9, 12, 15, 18, 24, and 30. The heavy ones are weighted with lead.

Test 17. Thirteen pictures of familiar objects are arranged on a card. The pictures are about three inches in size.

Test 18. These two designs are used together.

Test 21. These lines differ in length from one to four millimeters and it requires a distinctly higher intelligence to get them right than in the case of Test 10.

Test 24. Explain carefully, with illustration, what a rhyme is.

Test 25. The words in parenthesis are to be supplied by the child. Another story can be used if desired. The word should always come at the end of the sentence and be such that, if the child has listened to the reading of the sentence and understands it, he supplies the word the instant the teacher hesitates.

Test 26. Substitute words from the child's environment.

Test 27. It will be noted that the sentences are progressive. Therefore, when one has gotten beyond a child's depth it is unnecessary to go farther.

Test 28. The correct answer is, of course, 4:30 and 11:10.

Test 29. Fold a sheet of paper twice in different directions. Then with scissors cut off the corner which would be the center of the unfolded sheet; also cut a rectangular notch from one side next to the portion first cut off. What will be the shape of the hole when the paper is unfolded?

Have the child draw on a separate sheet what he thinks the hole will look like.

Professor Binet finds four kinds of responses to these tests, as follows:

1. No solution. Either the child says nothing or makes such a gross error that it amounts to total failure. This is indicated by the minus sign (-).

2. Partial solution. Child gives an answer that shows more or less comprehension, though not fully correct. This is marked one-half, one-fourth, three-fourths, etc.

3. Correct answer. This is indicated by the plus sign (+).
4. Absurdity. These are common and are important. Such an answer is indicated by an exclamation point (!).

He also notes the reasons (apparent) for the various answers.

- 1) Ignorance. Child does not know the word we use or the object involved in the test. This is indicated by an "I."
- 2) Resistance to the test, through stubbornness or the like. This is indicated by "R."
- 3) Timidity. Indicated by "T."
- 4) Defect of attention. Indicated by "D." There are several forms of this. Accidental distraction; constitutional distraction, common among the abnormal and comprising distraction by dispersed perceptions, distraction by pre-occupation and distraction through lack of fixation of attention.

According to these tests we have the following classification:

A. Idiots:

1. Idiot negative, no manifestation of a life of relation; reacts to no test.
2. Idiot with voluntary regard. Follows an object with eyes. Reacts to the first test.
3. Idiot with prehension. Can develop an act of prehension. Responds to the first three tests.
4. Idiot with recognition of nourishment. Does the fourth and fifth tests but no farther.
5. Idiot with faculty of imitation. He stops at the sixth test.

B. Imbeciles:

1. Imbecile with faculty of naming. Answers question: "What is that thing?"
2. Imbecile with faculty of comparison. Can compare two lines and two weights, can repeat three figures, but goes no farther than Test 12.
3. Imbecile with faculty of repetition of a discourse; is able to repeat simple phrases. Imbeciles have the aptitude of a normal child of about two to five years.

C. Feeble-Minded:

1. The feeble-minded with faculty of reasoned comparison; those who can recognize and state the difference between two given objects.
2. The feeble-minded with the faculty of seriation; those who are able to put in order five weights of the same volume (Test 22).

As a further aid in understanding the meaning of our results, we have the following statement of how normal children react to the tests:

Normal children respond as follows:

The child of three years names, and recognizes after the name, the majority of objects figuring in a series of objects and images pertaining to the habitual domain of the child.

The child of five years for the most part repeats three figures, compares two lines, and after a lesson, two weights; is likewise able to define a usual object.

The child of seven years responds as follows:

A. Memory of immediate repetition. He repeats three phrases out of eight (Test 15), and commits an average of three errors of absurdity or nonsense.

B. Sensorial intelligence. He makes in Test 21 an average of one to five errors, especially in the second part of the small lines; he commits one to three errors in the seriation of weights (Test 22) and an incalculable number of errors in Test 23.

C. Suggestibility. Among ten children, four did not resist the suggestion; two hesitated once; one hesitated twice; two hesitated three times; and one only refused the suggestion three times.

D. Intelligence with the development of language. He cannot find rhymes; he does nothing with Tests 26 and 30; on the first twenty abstract questions of Test 27 he gives as minimum 6.5 silences and one absurdity; as maximum eleven silences and two absurdities.

Child of nine years:

A. Memory of immediate repetition. He repeats on the average four phrases and makes no error of absurdity or nonsense; retains 6.2 images out of thirteen, and repeats six figures.

B. Sensorial intelligence. He commits one error in the second part of the small lines. (With the large lines girls of 20 years make four, five, and six errors).

In Test 22 he commits four errors; in Test 23, two errors on the average, with a maximum of five.

Test 29 is not appreciated.

C. Suggestibility. Of ten children, two take all of the suggestions; two hesitate once; three hesitate twice; two refuse all.

D. Intelligence with development of language. He gives one, two, three, four rhymes in a minute. He does not respond to Tests 26 and 30; makes as minimum five silences and one absurdity, and maximum of twelve silences and three absurdities in Test 27.

Child of eleven years:

A. He repeats five phrases, makes only half an error of absurdity or nonsense, retains 7.2 images and recites six figures.

B. He makes .2 errors in the second part of the small lines, makes 2.4 errors in the seriation of weights; and two errors with a maximum of five in Test 23. In Test 29 he sometimes attains to putting a lozenge in the center of the paper.

C. Suggestibility. Of nine children, three hesitate once; one hesitates twice; two hesitate three times; two refuse two suggestions; and one refuses the three.

D. In Test 24 he gives many rhymes; to Tests 26 and 30 he hardly responds. In Test 27 he makes minimum two silences and .5 absurdities; maximum five silences and two absurdities.

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For assistance in the preparation of this bibliography, acknowledgments are due E. M. Van Cleve, superintendent of the School for the Blind, Columbus, Ohio; Dr. F. Lyman Wells, assistant in psycho-pathology, McLean Hospital, Waverly, Mass., and Dr. Bird Baldwin, of Swarthmore College, Swarthmore, Pa.

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- HALL, FRANK H. "The Blind, Deaf, and Deaf-Blind Compared with Normal Children in Respect to Imaginative Power," *Trans. Ill. Soc. for Child Study*, Vol. IV (1899), pp. 18-30.

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- JAVAL, DR. EMILE. *On Becoming Blind*. (A very remarkable treatise.) New York: Macmillan, 1905, pp. 191. (\$1.25.)
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- LASIZERANNE, MAURICE. *The Blind as Seen Through Blind Eyes*. New York: G. P. Putnams, 1893, pp. 154.
- Proceedings, Department of Special Education, N. E. A.* (Four papers.)
- Proc. N. E. A.*, 1903, pp. 985-1037. (1) "Influence of Study of Unusual Child on Teaching of Usual;" (2) "Should the Scope of Public School be Benevolent, so as to Take in All Children Capable of Education?" (3) "How Can the Term 'Charitable' Be Justly Applied to Education of Any Children?" (4) "What Teachers Need to Know about Sense Defects and Impediments."
- POULSSON, ANNIE EMILIE. *Blind Children's Kindergartens. Wide Awake*. Boston: D. Lothrop & Co., 1883.
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- MACMILLAN, D. P. AND BRUNER, F. G. "Investigations Concerning Deaf Children." *Pub. Department of Child Study and Pedagogic Investigation*, Public Schools, Chicago. (Experimental and Pedagogical.)
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Respectfully submitted,

FRANK G. BRUNER, Assistant Director, Department of Child Study,
Chicago Public Schools, *Chairman*

EARL BARNES, Lecturer in Education, Philadelphia, Pa.

WALTER F. DEARBORN, Assistant Professor of Education, The University of Chicago

DEPARTMENT OF INDIAN EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—CHARLES E. BURTON, superintendent of United States Indian School, Grand Junction, Colo.

Vice-President—LESLIE M. COMPTON, superintendent of Indian School, Tomah, Wis.

Secretary—MISS ESTELLE REEL, general superintendent of Indian Schools, Washington, D. C.

FIRST SESSION.—MONDAY MORNING, JULY 5, 1909

The Department of Indian Education met in the Unity Church at 9:30 A. M., with the president, Charles E. Burton, superintendent of Grand Junction Indian Schools, Grand Junction, Colo., in the chair.

The following program was presented:

Music, furnished by the Grand Junction Orchestra.

Vocal Solo, Mrs. Wilberforce J. Wightman, Denver, Colo.

Invocation, Rev. David Utter, Pastor of Unity Church.

Greetings were given by:

Hon. John F. Shafroth, governor of Colorado.

Dr. E. L. Bartlett, president, Chamber of Commerce, Denver, Colo.

Hon. Katherine M. Cook, state superintendent of public instruction, Denver, Colo.

Hon. Katherine L. Craig, ex-superintendent of public instruction, Denver, Colo.

Hon. Charles E. Chadsey, superintendent of public schools, Denver, Colo.

Hon. A. J. Spengel, supervisor, Denver, Colo.

The president's address, "A Résumé of Indian Work," was given by Charles E. Burton, superintendent of Grand Junction Indian School, Grand Junction, Colo.

"The Prevention of Tuberculosis in the Indian Schools" was the topic of a paper presented by Dr. Joseph A. Murphy, medical supervisor of Indian Schools, Washington, D. C.

After a few remarks by Miss Estelle Reel, general superintendent of Indian schools, Washington, D. C., some demonstration lessons with classes of Indian pupils were presented by Miss Katherine L. Keck and Miss Mae McCauley, of Haskell Institute, Lawrence, Kans.

A demonstration luncheon, prepared and served by Indian pupils, concluded the session.

SECOND SESSION.—TUESDAY MORNING, JULY 6, 1909

The second session of the department was held Tuesday morning at 9:30, President Charles E. Burton presiding.

The following program was presented:

Music, furnished by the Grand Junction Orchestra.

Invocation and Address, Rt. Rev. Nicholas C. Matz, Bishop of Denver, Colo.

Violin Solo, Miss Jeannette McDonald, Denver, Colo.

The following papers were then presented:

"Our Educational Duties to the Indian," Dr. James H. Baker, president of the University of Colorado, Boulder, Colo.

"The Correlation of Literary and Industrial Subjects in the Classroom," Dr. Z. X. Snyder, president of the State Normal School, Greeley, Colo.

"Essential Features in the Education of the Child Races," Dr. Charles Bartlett Dyke, head master in the State Preparatory School, Boulder, Colo.

"The Teacher's Responsibility to the Indian Child," Sylvanus L. Heeter, superintendent of city schools, St. Paul, Minn.

"Character-Building—the Foundation of Education," John Herbert Phillips, superintendent of city schools, Birmingham, Ala.

"What Education Has Done for the Indian," H. B. Peairs, superintendent, Indian School, Lawrence, Kans.

Demonstration lessons with classes of Indian children, presented by Miss Maggie Harper, teacher, Indian School, Lawrence, Kans.

THIRD SESSION.—THURSDAY, JULY 8, 1909

A Round-Table Conference was held on Thursday morning, at 9:30, President Charles E. Burton presiding.

The following program was presented:

Invocation, Rabbi William S. Friedman, Denver, Colo.

Music, by the Grand Junction Indian School Orchestra.

"Moral Training," Ben. B. Lindsey, Judge of the Juvenile Court, Denver, Colo.; discussion led by G. W. Cross, of Tohatchi Indian School, Tohatchi, N. Mex.

"The Preservation of Aboriginal Arts," A. J. Fynn, principal of the Longfellow School, Denver, Colo.

"Elementary Industrial Training in the Day School," S. Toledo Sherry, day school inspector, Standing Rock Reservation, Fort Yates, N. Dak.

The following resolutions were offered and on motion adopted by unanimous vote:

Resolved, That the institute of the Department of Indian Education, held at Denver, Colorado, July 5 to 9, under the direction of Hon. Robert G. Valentine, Commissioner of Indian Affairs, was the most successful meeting ever held in the history of the department; that we hereby express our appreciation of his generosity in making it possible to present such practical demonstration lessons, and such an extensive and instructive exhibit; that we will co-operate to the fullest extent of our ability in his campaign against the suppression of tuberculosis among Indian people; that we will use our best efforts in fostering the native arts of the Indians, and that we will faithfully and loyally strive to carry out the policy which he has outlined for the industrial and literary education of Indian children.

Resolved, further, That we appreciate the untiring and efficient efforts of Superintendent Reel in introducing into our schools practical methods of instruction, and her persistent labors which have contributed to the success of this institute; that we tender our thanks to Mr. Charles E. Burton, president of the department, for the capable and impartial manner in which he presided over our sessions; that we are grateful to the local committee, and to the merchants who contributed to the success of the demonstration lessons by loaning necessary tools and implements; to the teachers and students of Haskell Institute, who have so ably demonstrated to the pupils the practical training the government is affording the Indian children; that we acknowledge the courtesies extended and the hospitality of the people of Denver, and we thank the local press for the extensive reports of our proceedings.

The department then adjourned.

ESTELLE REEL, *Secretary*

PAPERS AND DISCUSSIONS

PRESIDENT'S ADDRESS

A RÉSUMÉ OF INDIAN WORK

CHARLES E. BURTON, SUPERINTENDENT OF INDIAN SCHOOL, GRAND JUNCTION, COLO.

Progress is being made in Indian work both in the schools and on the reservations. Indians are taking their places beside their white brothers much more than ever before. Those of us who have been years in the service know that a decade ago few Indians were thought capable of competing with the whites in any pursuit. The last two or three years have seen keen competition between the Indian and the whites in stock-raising, mercantile business on the reservations, and as teachers, stenographers, disciplinarians, matrons, and other positions in the schools.

On the Navajo and Moqui reservations there are a score of young men who are conducting trading posts among their own people and keenly competing with white traders, compelling them in many cases to close their businesses. These young Indians go to Albuquerque, Santa Fé, and even to St. Louis to lay in their stock of goods; they talk excellent English, wear as good clothes as anyone, and are driving sharp competition with the white man.

Indian pupils from the Grand Junction School are taking positions as stenographers, engineers, and farmers at not less than \$60 per month for twelve months in the year. The band and orchestra compete lively with white organizations.

Pressure is being made at all the non-reservation schools toward industrial features of education. Pupils are taught to build houses, frame, brick, concrete, and cement block; to build and repair wagons, buggies, mowers, etc.; to paint and repair in a workmanlike manner; to raise stock and to do dairy work. Girls are taught to do good housekeeping, cook, sew, weave blankets. They become expert dressmakers and even do a little millinery work.

As life in the fullest is not all poetry, the poetry of music enters into Indian training and wields an influence for good, sometimes overlooked. Stirring national airs, together with the raising and lowering of the stars and stripes, teach patriotism and a pride in citizenship.

Great progress has been made in the clerical work of the Indian service within the last two years. Formerly a voucher for the purchase of a bolt of calico resembled a huge petition to Congress with its multiplicity of certificates from interpreters, inspectors, weighers' returns, and what not, until a poor superintendent had rather, and in many cases did, pay for an article than cobweb his brain with such a multiplicity of details too numerous to mention. If Commissioner Leupp did nothing else than cut the Gordian knot of red-tapeism, his administration would be long and favorably remembered. One can

now get up a voucher without having the nightmare and without having a brainstorm when he receives his letter of exceptions from the Indian office, or from the auditor, many months later.

There has been great agitation against the non-reservation schools during the last two years. Several have been closed. Sentiment is divided. One argument is made that the civilization and education of the parent is as necessary as that of the child, and that the day school and the reservation boarding school, which come in contact with the daily life of the Indian, are, in reality, the little red schoolhouses of the American school system, and hence the only feature of the system that accomplishes good. Others argue that the non-reservation school system has been built up at an enormous cost; that there are still thousands of Indian children without school facilities on the reservations; and that it would be a losing policy to destroy the expensive non-reservation schools and build up another more expensive system on the reservations, which are usually situated remote from railroads and other bases of supplies.

Commissioner Leupp has stirred up the moss-backs in the Indian service. By some he is considered visionary and impractical. But so was Galilee so considered, and so was William Lloyd Garrison, and Harriet Beecher Stowe, and hosts of others who lived decades ago in advance of their times, and who saw great visions of the future from the mountain-tops of their exalted positions. The whole world now recognizes that they were right. The scoffs and adverse criticisms have changed to admiration and applause and a grateful nation now honors and reveres their memories. Commissioner Valentine is purifying the service, building hospitals, cleaning the Indian homes and villages, and rendering them more sanitary, stamping out tuberculosis, trachoma, and kindred complaints, and applying rigid measures for relief and cure; he is sending better goods and supplies to schools and agencies; he has by personal inspection of schools and agencies and their employees ferreted out worthless and incapable employees and supplanted them by those considered more worthy.

I should be recreant to my duty if I closed my remarks without giving credit to the admirable administration of our worthy superintendent. For nearly twelve years she has bravely and efficiently held the reins; she has seen the service grow mightily under her watchful care; she has fostered and nurtured the service, and by tactful instruction, kind and helpful discipline, has aided weak employees to become strong and capable, and poor schools to become excellent ones. Her administration will be remembered by its length of service, its helpfulness, its brightness, its alertness, and its efficiency.

THE PREVENTION OF TUBERCULOSIS IN THE INDIAN SCHOOLS

JOSEPH F. MURPHY, MEDICAL SUPERVISOR, UNITED STATES INDIAN SERVICE, WASHINGTON, D. C.

Dr. Trudeau recently wrote, "The more attention you give to the tuberculosis problem, the more it grows in size," and the enormity of the problem has certainly appealed to me while thinking on what would be the most practical aspect of the question to dwell on. I wish to confine myself this morning to the responsibility of the employees of the Indian Service in the prevention of tuberculosis, and give a few practical hints regarding the solution of the problem in the Indian schools.

The crusade against tuberculosis is one of the greatest works which the present generation has so far attempted. The fight against it has received a tremendous impetus from the International Congress on Tuberculosis recently held at Washington. The public has awakened; money has been forthcoming; men and women thoroly in earnest have been enlisted to take part in the campaign. The public must be kept awake, more money collected, and more men and women enlisted. It is not a battle of a year or of a generation, but it will have to be of several generations. The time will certainly come when tuberculosis will no longer be a curse to the world. How soon depends largely on the earnestness, intelligence, and persistence of the effort which is exerted in the work.

The eradication of the disease is a problem that cannot be solved solely by the medical man. He must be assisted by the combined intelligence and labor of all educated men and women who should be interested in the welfare and health of their people.

The mortality of tuberculosis is far higher among the Indians than among the negroes of the white population of this country. Statistics on this point are still very incomplete, but what records there are available show a frightful mortality among many tribes, a somewhat less one among others, but an exceeding serious one in all. We of the Indian Service cannot avoid the responsibility for the continuance of this condition. More work must be done toward the prevention of this disease among the Indians than has been done in the past. More of the employees in the Indian Service must take a hand to assist in the fight against it than there ever have been in the past. More of the teachers must realize that their duty is not ended in looking after the mental welfare of the child, but that they must take an interest in the physical welfare also, and fit the child to become a useful member of society, who not only knows the three R's but who knows how to live right. More of the matrons, disciplinarians, and superintendents must fully realize the danger of the spread of infection in their schools, and must be more alert to prevent it. More of the field matrons must learn to consider the homes in which tubercular infection has gained an entrance to be their special care, and they should know their

responsibility in teaching the members of those homes the cause and method of spread of the disease, the disposal of the patient's sputum, the sanitary care of the patient, and the prevention of the infection, especially among the children living there. These homes are the centers of infection, and work along these lines by competent and conscientious field matrons would do a vast amount of good at the source of the trouble. There is not an employee in the Service who should feel himself exempt from this campaign of education, and the more he knows about the disease the greater his responsibility.

The more intelligent have learned that the great majority of diseases are preventable, and especially the infectious diseases. We all know that cholera, yellow fever, smallpox, and many other diseases, once scourges of the world, are preventable, and we are now just beginning to realize that tuberculosis belongs to this same class. A large number of our own race are still apathetic or indifferent to this fact. Among ourselves diseases have long been looked upon as of unknown and unknowable origin, or as due to divine wrath, and over which man had but little or no control. In contrast with our own recent beliefs, the Indian, still under the influence of superstitions which have prevailed for generations with his race, still a believer in the charms and incantations of his untaught medicine man, still under the spell of his mythical legends, can with much greater difficulty be made to realize the actual facts.

It is indeed difficult to bring the older Indian to a realization of his own betterment, of the power that he has of preventing disease by his own action, or of the reasons for it. One can hardly expect a complete mental evolution, a throwing-over of all traditions among these older Indians, altho this statement should not be interpreted to mean that no effort should be made to instruct them. Much can be done, and should be done, but the greatest good may be accomplished by the education of the Indian children who are attending the schools, in the cause and methods of prevention of the disease.

The Indian children will be the best promoters of new ideas in the homes, and will be able thru the training received at school to advance materially all efforts along other lines. The education of the younger Indians will be the quickest and most effective means of disseminating knowledge as to the nature of tuberculosis, and the best means of prevention and cure.

Tuberculosis should certainly be studied in the Indian schools in addition to the prescribed curriculum. The facts desirable to teach lend themselves readily to distribution among the various grades and classes. A textbook on the subject has been placed in the grades in some cities in the white schools. In the District of Columbia there is a book on the subject, written by two physicians and a layman, which is being studied in the seventh and eighth grades of the public schools. This is a step in the right direction. A pamphlet will be prepared and distributed among the Indians by the Indian Office in the near future.

Dr. William White, of Pittsburg, proposed to the National Association for the Prevention of Tuberculosis recently that all cities should appropriate

funds for providing competent scientists whose duty must be to teach the children of the schools the evils of tuberculosis and other contagious diseases. This, too, is an excellent suggestion. We have paid physicians in our Service. The rules of the Office require that part of their duty shall be work along these lines. Superintendents should see that this is carried out, but teachers should supplement this by classroom exercises.

In our large schools the tendency is to handle the mass rather than the individual. Personal attention to the health of the individual child is frequently neglected. The matron is busy with her cares and duties; so many baths must be given or preparation made for this or that entertainment, details must be assigned, and certain work imperatively done. Frequently the child's health is not considered nor the work selected that is most suited to the individual. The teacher, however, has the child under her direct supervision and care for one-half of every day. She should feel that the child is more than a machine, and she is certainly a most competent judge as to whether the child appears perfectly well or whether, on the other hand, he coughs, or is dull, listless, pale, or not progressing as he should. Children of this sort should be reported by the teacher to the school physician so that he may examine, and discover what the real trouble is before it becomes so advanced that it is too late.

Dr. E. S. Bullock, of the New Mexico Cottage Sanitarium, after a long experience with tuberculosis said:

No man can spend years in contact with tuberculosis and have left any great enthusiasm for the results of treatment, climatic or otherwise. We are coming to recognize clearly that the root of the evil must be attacked by prevention, not cure, and that it would be better for civilization if all the money expended in attempts at "cure" had been directed to the accomplishment of prevention instead. It is, however, our duty to care for the sick as well as to prevent sickness, and after infection has occurred it becomes our plain duty to do all we can for the unfortunate person on whom the parasite has fastened. A careful study and observation of tuberculosis will convince anyone that, left to itself after the onset of tangible symptoms, it is the same old fatal disease it always has been, and that, even under the best of conditions, and with every modern weapon brought to bear, it is ultimately nearly always fatal in any stage beyond incipency. Until we have learned to bring these people under treatment in the early stages we have no right to wax enthusiastic over our efforts to cure tuberculosis.

It is in the attempt to recognize the disease in its early stage that the personal interest of the teacher in the health of the individual pupil is solicited. It has been suggested that teachers weigh their pupils monthly, keeping a record of weights, and thus have a check on children not gaining as they should. Healthy growing children should gain steadily in weight, and such a record would be of inestimable value to the doctor in his early diagnosis and treatment of an incipient case of tuberculosis.

I wish to suggest also to superintendents that a special diet table be provided where pupils, recommended by teachers, matrons, or the school physician, may obtain eggs and milk in addition to the government ration. The increase

in nutrition and building-up in this way of children who are not thriving in the school may arrest in its incipency many cases of tuberculosis.

The farmers at the schools should see that the hospital and diet table are more freely provided with eggs. The milk provided should be uninfected. Superintendents should have their dairy herd tested with tuberculin, and should dispose of all cattle reacting.

The subject of the source of infection in tuberculosis among the Indians, due to infected milk, is very interesting. In a number of the tribes badly infected with tuberculosis the Indians drink no milk. If there is anyone here who can supply me with observations of his own on this point I will be glad to hear them.

Milk is very frequently a source of disease from the fact that bacteria once introduced into it grow and multiply very rapidly. By the time it is consumed it may contain countless billions of bacteria, while at the time of contamination only a few were introduced. For this reason superintendents should make it a point of inspection to see that milk is not contaminated; that farmers insist on the most scrupulous cleanliness of the hands of the milkers, the udders of the cows, and the cleanliness of the milk cans and pails. Milk should be cooled quickly after milking and all precautions taken against the growth of bacteria in it.

Tuberculosis is more frequent during the first two or three years of life, when children are so commonly confined, than from the third to the fifteenth year when they live in the open air so largely. From the fifteenth to middle life, or later, the disease increases in frequency because of greater exposure to infection. This gives us a hint that children of the Indian tribes who are usually accustomed to living in the open air are confined too closely after being taken into the school. Not enough fresh air is admitted into the dormitories or into the schoolroom. More open-air exercise should be provided and teachers should have the windows open between recitations, giving deep breathing and other exercises during these times.

Proper supervision is not given to sweeping. Dry sweeping, causing the stirring-up of almost unbreathable clouds of dust, seems to be the rule rather than the exception. How many infections and deaths this one practice has caused it is impossible to say, but there is no doubt that this has been the source of countless cases of tuberculosis. No dry sweeping should be permitted, and children should be taught the reason for this. The insistence upon this point should not only be made an object-lesson at the school but the Indian girls should be instructed to do the same in their homes. The proper methods of cleanliness for the home should not only be taught to the girls, but the boys also should be made to feel, as they go out from the school to build their own homes in the future, that they should take a pride in having them well lighted by plenty of windows, and well ventilated. So many of these homes which are now the hotbeds of tuberculosis would be improved, and the disease prevented if these facts were impressed upon the children at school.

Professor Vaughn, of the University of Michigan, said,

To take the life of a fellow-man wilfully is murder, the greatest of all crimes; to do so through ignorance or carelessness is manslaughter. In effect it is the same as murder, although in guilt it may be less heinous. The great majority of deaths from tuberculosis are due to manslaughter, and this fact should be recognized. The man who carelessly or ignorantly expectorates infected sputum, which, after drying, may be inhaled and may infect another, is guilty of manslaughter. The same is true of the dairyman who sells infected milk, or of the landlord who rents an infected house. It is essential that we recognize these truths. Then we can be successful in our crusade against tuberculosis. The man who would put arsenic in milk or drinking water would be regarded by the law as either a lunatic or a criminal, and would be so dealt with that he could not repeat the offense. The man who sells milk or other food infected with tubercle bacillus, or other disease-producing germs, is distributing a more deadly poison than arsenic, and he should be forbidden the practice. We need wise laws in order to restrict and eradicate tuberculosis, and their adoption and enforcement are sure to come as soon as the mass of the people see the matter in the right light.

Have we not been guilty of criminal negligence if we have not prevented spitting around our schools and in them? Have we not been guilty if we have failed to disinfect the rooms, bedding, and clothing of tubercular children sent from our schools? Have we not been guilty of the spread of tuberculosis and other contagious diseases when we put two or more children in one bed? Who can tell that one may not have incipient tuberculosis? One of the last orders given by the retiring Commissioner was to prevent the use of double beds for the children. How many diseased children have the Indian Service to account for by continuing this practice up to the present time? This order may cause a great deal of inconvenience and readjustment of dormitories now, but it is certainly one of the wisest measures which have been adopted for the prevention of disease.

The most important and most frequent means of the spread of tuberculosis is the sputum of the infected individual. If all sputum could be destroyed, and all spitting in buildings and about the grounds absolutely prevented, there would be practically no spread of the infection in our schools. Why cannot regulations absolutely prohibiting spitting be enforced? This should certainly be done. One of our finest Indian schools was found on inspection to have the most spitting about the grounds. The spitting was largely outside, but it was unsightly, it was tramped and dragged by dresses into the school-rooms and dormitories, only to dry and blow about these rooms. We are certainly exercising criminal negligence if we fail to prevent this custom.

The sputum of all pupils suspected of having tuberculosis should be examined microscopically. Some of the service physicians have microscopes, and others have not. It is my intention to recommend that a microscopist be appointed to examine all sputum sent him by physicians or agents in the Service.

It has been the policy of the Indian Office to send all tubercular Indians home from the schools, not because this is an ideal procedure but because

the schools are for healthy children, and the retaining of a pupil infected with tuberculosis would be a source of contagion to others at the school.

There has been heretofore no place to send pupils other than their homes. Camps for the treatment of tuberculosis are now being constructed on the reservations, and in addition screen porches are being built to some of the school hospitals for the segregation and treatment of tubercular suspects. One tubercular colony is located at Colville, Wash., one camp has just been finished at Laguna, N. Mex., and a camp is about to be erected at Phoenix, Ariz. These are starting on a small scale, but they will undoubtedly increase in size and number.

Pupils in the Indian schools are now being regularly inspected for tuberculosis and other contagious diseases. Renewed efforts are being made on all sides looking toward the stamping-out of the disease.

Much praise is due ex-Commissioner Leupp for the reform he has instituted in the Service along medical lines. His last tour of inspection, made at the time when he was on the verge of nervous prostration, was for the purpose of improving the health conditions among the Indians, and stamping out trachoma.

The members of the Service attending this Institute should thoroly inform themselves upon the subject of tuberculosis, its method of spread, the proper disposal of sputum, and the treatment. The tuberculosis exhibit downstairs was sent for the purpose of your education and is well worthy of careful inspection and study. It is my intention to demonstrate by the use of the microscope, the tubercle bacillus, so that all here may see and thus better comprehend how easily the germ is disseminated.

As you go out from this Institute I would like the teachers here to feel that they have a responsible share in this great work. They will have a tremendous influence in the fight, because successful eradication will depend in large part upon the extent to which the rising generation are taught concerning its prevention and cure.

In spreading the knowledge of these truths, in the personal interest in the physical condition of the pupils under their charge, looking toward the early diagnosis and cure at the only time when tuberculosis may be cured—that is, in its incipency—and in the conscientious performance of these duties and added responsibilities, the teachers of the Indian children can be of inestimable service in this great struggle.

REMARKS

MISS ESTELLE REEL, SUPERINTENDENT OF INDIAN SCHOOLS,
WASHINGTON, D. C.

It is not necessary for me to assure the employees of the Indian schools that the Office deeply appreciates your attendance at this convention. It is the first congress of Indian workers convened under the administration of

Hon. R. G. Valentine, the new Commissioner of Indian Affairs, with whom many of you have a personal acquaintance, and for whom I am sure you will be loyal workers.

Eleven years ago we met in Colorado Springs, but this is the first time that our department has met in the city of Denver, and I want to say to our hosts, the governor, and other officials who have assured us that they will leave no stone unturned to make our stay pleasant and profitable, that we consider ourselves fortunate in meeting in Denver.

The value of an education to any child lies in its usefulness to him after leaving school, and thruout this convention we wish to emphasize the essentials in educating the Indian. We want especially to urge the teachers to give close attention to the demonstration lesson which will be presented by teachers in the Service who made have special preparation, and which will show more clearly how the Office desires you to correlate the literary and industrial work in order that the instruction given may best meet the immediate and practical needs of the pupils. I also want to urge you to attend as many of the sessions of the National Education Association and its departments as possible.

DEMONSTRATION LESSON

WHEAT AND BREAD-MAKING

Demonstration lessons on the subject of wheat and bread-making were presented with classes of Indian children under the direction of Miss Mae McCauley and Miss Katherine L. Keck, teachers of the United States Indian School, Lawrence, Kans.

I. MISS MAE MCCAULEY: I am sure you will all agree that there is no more important subject in which a child should be instructed than in the care of health, and one of the first requisites in keeping good health is good food.

For my lesson I have selected the subjects "Wheat" and "Bread." I wish you to bear in mind that I am not a teacher of cooking but of the fifth grade, and, as you will observe, am of the Chippewa blood. I am a graduate of Haskell Indian Institute.

In this lesson I shall endeavor to show how practical subjects may be used in teaching reading and arithmetic. Penmanship may be taught thru writing recipes, and instruction in geography given by studying the crops and markets of the different states. It has always seemed to me that it would be of more value to the children if the subjects teachers use in the classroom were selected with reference to the occupations which the pupils will need to know after leaving school instead of spending so much time teaching the height of mountains, the length of rivers, etc.

Many of the best schools of the United States consider it advisable to have the theory of cooking taught in the classroom, and it would seem equally important for teachers of the Indian School Service to make this an essential part of their work, not only for girls, but for boys who are taught cooking to advantage. Teachers can begin the first year the child enters school, and if the pupils are non-English speaking and the subject is "Bread," show them a piece of Indian bread and give the Indian name for bread. Then show them a piece of common bread and teach the English name, "bread," etc. Thus the foundation is laid and this work can be carried on thru the grades, the teacher giving occasional demonstrations by actual cooking, using the oil stove in the classroom, then the pupils are ready to take up the actual cooking of meals under the domestic-science teacher.

Some Indian tribes use cornmeal, some bean flour, others use acorn flour, but the majority of people use wheat flour for making bread.

[Here followed a detailed lesson on "Wheat" consisting of questions by the teacher and answers by the pupils, together with problems relative to the topic.]

II. MISS KATHERINE L. KECK: "New occasions teach new duties. Time makes ancient good uncouth" has been well said. The tepee home and the life of its inmates may have been good, but the progress of civilization is forcing the Indian from these shelters into more permanent homes, where the new duties crowd too fast for his comprehension unaided. All that is best in the life of a people centers around the home. Thus the subject of home-making becomes of the greatest importance in our Indian training schools. The Indian girl receives less training from her home environment than her white sister. We must therefore give her the more in school; must also make her classes training classes for the mothers as well.

You have seen how the classroom teacher may use such practical subjects as bread-making or other household duties to teach the English branches to Indian girls, and at the same time give training which will save much time on entering the regular classes in that work, or prove of real value in the home.

Discussions of the price and value of the different cuts of meat, of vegetables, cereals, and fruits, methods of keeping account of household expenses, average cost of simple furnishings, and utensils, rules of hygiene and sanitation may furnish live, interesting subjects for the use in teaching reading, writing, language, spelling, and arithmetic, and the facts thus gained become of equal value with the training gained thru their employment.

I have charge of the domestic-science department, as it is technically called, at Haskell Institute, the girls coming to me from the fifth grade upward.

Below this grade the work is carried on by the classroom teacher, who leads the pupil step by step to furnish a small home with the furniture and utensils necessary for cooking, eating, and sleeping, considering use and price of each. She is taught the mechanism of the stove and how to control its fuel and heat in cooking the simpler foods and beverages.

With lessons on the sanitary care of food, dishes, bedclothing, and sleeping-room the pupil is prepared for the broader work of the domestic-science department. Here the work includes the study of food principles, methods of cooking, digestion, cost and care of food, use and care of milk and butter, planning and serving family meals, hygiene and sanitation, and laundry work.

Classes coming in well prepared from the lower grades may advance rapidly thru the daily practice in planning, cooking, and serving meals, caring for dairy products, and laundering department linen. Effort is constantly made to cultivate adaptability—the power of making the most of the means at hand. A double boiler is a necessity in cooking cereals and milk and egg foods over the fire, but a small saucepan in a larger one closely covered serves the purpose equally well. Often in call, we hear the statement, "You never showed us how to do it." The reply is, "Try to work it out from certain principles already given."

A dry-goods box, curtained and shelved, may serve the needs of a simple household as well as a costly kitchen cabinet, and the ingenuity which constructed it be developed and strengthened for further works of improvement. We find also discussions of comparative values of the greatest importance to the girls.

A girl remarked in class, "My mother says we can't have so many utensils to work with at home," meaning of course, "We can't do so well." Asked why they couldn't have them she said, "They cost so much," "What costs so much?" "A double boiler for one thing." When told an ordinary double boiler costs no more than the large ribbon bow on her hair she said, "I guess it's because we don't think." That must be our work—to teach pupils to *think* and to know real values.

Perhaps you, as well as the girls, will be interested in considering the following study of values:

A chicken of $4\frac{1}{2}$ lbs., live weight, after being bled and beheaded is $4\frac{1}{8}$ lbs.; picked, $3\frac{7}{8}$ lbs.; feet off, $3\frac{3}{4}$ lbs.; drawn, 3 lbs.; boiled, $1\frac{1}{8}$ lbs.; minus bones, skin, and surplus fat, $\frac{7}{8}$ lb.; at 10 cents per lb. costs 45c for $\frac{7}{8}$ lb. edible flesh. Should not every housewife realize this and be able to compare its nutritive value with chuck steak, for instance, which for 48 cents will give 4 lbs. edible flesh for building up the body, strength, and tissue, and when well cooked prove thoroly appetizing?

[Here followed a statement by a pupil outlining the process of bread-making.]

OUR EDUCATIONAL DUTIES TO THE INDIAN

JAMES H. BAKER, PRESIDENT OF UNIVERSITY OF COLORADO,
BOULDER, COLO.

The question of how to make "good" Indians has been answered in various ways in the history of this country—and the record upon the whole has not been to our credit. We have killed them, we have exploited them, have formed and broken treaties with them, pauperized them, attempted to educate them, and now, I believe, are really educating them.

I recall some observations made some years ago when returning by the southern route from California. At a station near the Mohave Desert I saw Indians who were pauperized in spirit begging from the curious passengers; at another station were Indians selling blankets and pottery, their own handiwork representing their art and skill; still later we saw Indians working on railroad construction by the side of white laborers; and farther east we saw Indians who owned farms with neat cottages, and appeared industrious and prosperous. Two thoughts came to me: first, the Indian ultimately must be civilized as we understand civilization, become a self-supporting, self-respecting citizen; second, he may well preserve, if possible, the traditions, the art, and the pride of his race—at any rate he must be self-supporting.

It is a leading principle of education that we must take the individual where we find him and develop him from that point; must discover the virtues he already has instead of trying to transform him; and this principle applies to races yet undeveloped as measured by our standards. And there is not a primitive race that has not qualities from which the most civilized peoples may learn.

I am sure that Japan and China are fortunate in that they have been left mainly to take on our western progress in their own way, instead of being radically and rapidly modernized by foreign invasion. They will develop in accord with their own traditions a civilization far superior to any that could be forced upon them. Suppose that today some Englishman or American could surely trace his descent from some Briton of Caesar's time or from some invading Dane, would he not boast of his ancestry? It might be too large a use of the imagination to suppose a time in the distant future when an American citizen might say with pride, "Yes, sah, I have a trace of African blood in my veins and my ancestors were slaves;" but I am sure the time will come when

citizens of Indian descent may be able to point with pride to their ancestry and say, "We are of the original inhabitants of America." Booker Washington is right when he claims that any race like the negroes must learn pride of race; must have their own lawyers, doctors, preachers, leaders, and literature; must be taught the arts of industry.

I can only touch upon the present methods of dealing with Indian problems, and only upon the phase of their education. From what I can learn from reports and other sources regarding the work of reservation and other schools, I am impressed with two things: the Indians are given a practical industrial training and thus learn the first lessons of industry and of adaptation to modern civilization; also, attention is given to the growth of their own virtues, preservation of their art and traditions, pride in their own race and history. And these things appear to me right.

Our educational duties to the Indians are without limit—in justice we owe them all that we can possibly pay—but our obligation must be discharged with wisdom. We have underestimated our duty toward them; now we may be in danger of overdoing and thereby pauperizing them. We can best perform a long-delayed act of justice by giving them a practical education, by creating a spirit of self-dependence, and by allowing them to preserve, as they may, respect for their race and pride in their traditions.

ESSENTIAL FEATURES IN THE EDUCATION OF THE CHILD RACES

CHARLES BARTLETT DYKE, HEAD MASTER IN THE STATE PREPARATORY
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Today Americans are attempting to educate every race under the sun, with extremely limited knowledge of race differences and race possibilities. One very positive school of theorists demands identical education for all, in conformity with the equality postulated by our Declaration of Independence. Another equally positive school pleads for the development of the *best* in the Indian, the negro, the Filipino, the Hawaiian, instead of trying to make of him a poor white man.

To be sane, educational theory must rest upon scientific knowledge. Do race differences inhere in the shape of the skull, the texture of the hair, the pigment of the skin? Are psychical differences the result of education, or are they determined by hereditary impulses which have beaten with the hearts and coursed thru the veins of countless generations? What human possibilities are common to every race? Have all races equal intellectual ability? What is the *best* in every race to be fostered and preserved?

The various new American possessions, benevolently assimilated during the last decade, afford us a laboratory for the study of these vital problems. Hawaii is especially rich in racial types. There, for more than a century,

Caucasians, Mongolians, and Polynesians have freely mingled and intermarried. The pure-blooded natives have crossed with every Asiatic, European, and American nationality coming to their shores.

After some experience in teaching the Caucasian, the negro, and the Indian, my greatest personal interest in Hawaii centered about the question of race differences.

I became firmly convinced that psychical race differences are not eliminated in any appreciable number of generations, be the education what it may. In the Kamehameha Schools of Honolulu, like environment and opportunity leave untouched certain traits inherited from ancestors often unknown. At the age of twenty, the individual is plainly modified or even determined by the blood of his passive Polynesian ancestors, or by the more pronounced activity bequeathed him by Caucasian or Chinese or Japanese or Ethiopian. One of our students believed himself to be a pure native Hawaiian; but his woolly hair, his dancing gait, his airy manner, his boisterous laughter, and his gorgeous raiment all betrayed his negro blood—so opposed are all of these traits to the gentle dignity of the Hawaiian.

The liberal endowment of the Kamehameha Schools enables us to furnish board and tuition at the nominal sum of fifty dollars per year, with every encouragement to the students to work out their expenses by services on the farm or in the dairy or shops. Here again race characters appeared. Of the Chinese-Hawaiians 70 per cent. worked their own way thru school, wholly or in part; while the American-Hawaiians almost invariably induced some generous white man to pay for all of their expenses, thus enabling them to lead a life of elegant leisure. Again, while only 18 per cent. of the boys were Chinese-Hawaiians, they furnished more than one-half of the upper classmen, not because of their brilliancy, but because of the staying qualities of the Chinese blood. The pure Hawaiians lacked the physical and mental vigor for advanced work. The Caucasian-Hawaiian crosses were impatient of routine and restraint. But in the Chinese-Hawaiians, the patience and docility of the Chinese blood conquered the weakness and vacillation of the Hawaiian, and they plodded on steadily till graduation.

The foregoing argument points to fundamental differences in the races of men. In education, a knowledge of the race characteristics is fundamental. No system of education that neglects this principle can succeed. I will go farther, every race should rapidly become its own teacher. No white man can understand *fully* the American Indian, or the negro. His success as a teacher, therefore, is limited by his ignorance or imperfect knowledge of primitive race characters. The Tuskegee Institute is a notable example of what negro teachers can do with their own race.

Do not misunderstand me, white teachers are absolutely necessary, and are doing a noble work in the education of the primitive races, but it should be their constant aim to develop native teachers and leaders. No race can become self-respecting and rise to its full stature until it has its own leaders and teachers.

ARRESTED DEVELOPMENT

Arrested development is a very real problem in the education of all races. We have all used energy sufficient to move mountains in the vain attempt to introduce an idea into some dense mind, adult or adolescent. All men reach their intellectual growth, some early, others comparatively late in life. Psychologists maintain that Americans cease to be productive at the age of forty years. The primitive races attain their mental growth at a much earlier age. Take, for example, the mental power of abstract reason. By it men pursue the more intricate problems of learning and of life. In this field, primitive man is quickly beyond his depth. His development has ceased before reaching this highest form of intellectual power.

It is absurd to theorize about the propriety of a college education for the mass of negroes, or Indians, or Filipinos, or Hawaiians. They lack the intellect to acquire it. This is true to a smaller extent of the mass of white children. The scholar is the flower of civilization, born rather than made. And yet the curricula of our schools provide mainly for the development of scholars, tho we do not know what to do with them when they appear.

THE NATURE OF EDUCATION FOR PRIMITIVE RACES

Are the possibilities of the child races developed by fostering the best of their own civilization, or by supplanting it by the white man's civilization? This is an important question at issue.

The Indian may live in the Indian's world, the negro may live in the negro world, the Polynesian may live in the Polynesian world, but when those worlds become dominated by the white man, their inhabitants pass from the face of the earth.

One glance at the world of today shows it to be the white man's world, dominated by the white man's science, invention, industry, and ideals. The white man has set a standard of living that compels adoption by the Indian and other races. The corn dance is an interesting example of the red man's best, but if he is to continue to exist, he must learn to raise crops by cultivation rather than by appeasing the gods. The "joy of today" is an example of the negro's best, but if he is to escape the chain gang, he must learn to provide for the morrow. Hospitality, generosity, and toleration are the most striking qualities of Hawaiian character, but the germs of leprosy and plague will devour the race without segregation, the white man will wreck his home and steal his land, unless he adopt the white man's wisdom and thrift. The "gentleman of leisure" is an example of the Filipino's best, but he cannot live in a democracy until every peon becomes a man. Reverence is China's best, but industrial bondage is the result of allaying floods by the worship of a water snake, instead of by the construction of drains and reservoirs.

To exist in the white man's world demands knowledge of natural law, obedience to social control, deliverance from malevolent deities, and the ideals of democracy. The essentials of any child's education are: (1) A study of

nature in its broadest sense, including self-cultivation; (2) home arts and industries, culminating in a vocational training warranted by industrial capacity and social demand; (3) moral regulation of personal and social life; (4) such aesthetics as make for happiness and self-respect; for example, religion, music, and literature. It is a minor matter whether the child weaves raffia or reeds, or paints snakes or sunsets, except as his product augments his happiness or meets a social demand.

Such was the curriculum of the schools for Hawaiians founded by missionaries nearly eighty years ago. And such has been the curriculum of Hampton, Tuskegee, Carlisle, and Kamehameha. It is well to note that the Hawaiians who will survive have felt the influence of this training.

The reports of the Superintendent of Indian Schools of Hampton, of Carlisle, Tuskegee, and Kamehameha, and, better still, personal visits, prove conclusively that the training of the head, the heart, and the hand results in emancipation from the discomfort, the superstition, the ignorance, the fear, which hold the child races in bondage.

Comfortable, well-ordered homes, useful pursuits, places of trust and reward in the community, moral, self-respecting lives, prove the possibility of every race to survive in the white man's world.

I am in receipt of a letter from that gallant fighter and distinguished educator, General R. H. Pratt, in which he protests against the term "Child Races," saying most truly: "The Indian fought for his home and right to live in the land with such strength and ability, although feeble in numbers, as to lead us to give the highest honors to those of our own race who here and there succeeded in overcoming even small detachments of him; and the many millions of acres in our great Southland that have been subdued and made to yield untold riches almost entirely by negro labor is fullest evidence of his manly power."

We have no right to pronounce upon the possibilities of the average man. So long as one-tenth of our population goes hungry, so long as another tenth is unfed, so long as our average child receives only three and a half months of school training each year, it is clear that American possibilities are undeveloped. Moreover, so long as our schools for white children aim to produce scholars instead of fitting human beings to make the best of conditions, our highest possibilities cannot develop.

Nine years ago—and conditions have not greatly changed—Albert Shaw wrote in the *Review of Reviews*:

If I paid \$10,000 a year for it, I could not possibly give my own small boy anywhere in or about New York City the advantages of as good a school as the raggedest little negro child of Phoebus, Va., freely enjoys, whose education is under the care of the Hampton Institute and is carried on under the Institute's normal department in the John G. Whittier School.

Education of any kind is good both for the individual and for the state. That individual whose higher nerve centers have been trained by the acquisi-

tion of even the three R's is almost invariably saved from the grosser crimes, not by his little learning, but by the substitution or foresight for the "see snatch" instinct of the savage. That education is best which fits youth for the best possible life-existing conditions. Because that has been the aim of the great teachers of the child race, their school life is more potent in developing their possibilities than the school life of white children, planned as it is for the making of scholars.

Every normal child of every race is born with the possibilities of life, liberty, and happiness, and the sad fact that so many forfeit one or all of these rights before manhood proves that we are not rearing them to make the most of their possibilities.

It is indeed fortunate that General Armstrong, General Pratt, and others who founded our present system of education for the primitive races broke away from the conventional standards set by American colleges and universities for the development of scholars.

To summarize: The races of men feel, think, and act differently not only because of environment, but also because of hereditary impulses. The Indian differs from the negro, the negro differs from the Hawaiian, the Hawaiian differs from the Filipino, and the white man, *their teacher*, differs from them all. Education does not eliminate these differences.

While a man of one race can never fully understand the feelings, thoughts, and actions of his brother of different race, successful teaching demands a knowledge of race characters. Without such knowledge, the emotions will be improperly trained, the intellectual capacity will be misjudged, and the place that the child can best fill in the community will be misunderstood.

Progress must necessarily be slow, but our schools should aim to develop native teachers and leaders.

The mass of children of primitive races are not well developed in the power of abstract reason and of personal initiative. Vocational training, therefore, rather than higher education is their need, allowing full scope for those of exceptional ability to pursue college, professional, or technical training.

The emotions lie at the foundations of personal happiness and of all moral and social relations. Their development can best be accomplished thru the native folk-lore, art, music, and religion. But for economic reasons, primitive man must be trained in vocations that fit him for life in the white man's world. This is a fundamental requirement in the education of primitive races.

THE TEACHER'S RESPONSIBILITY TO THE INDIAN CHILD

S. L. HEETER, SUPERINTENDENT OF SCHOOLS, ST. PAUL, MINN.

An invitation to meet with the Department of Indian Education this morning has given me the occasion to acquaint myself somewhat with your problems. I have been pleased to note from reports of the department the progress made in carrying training to the thirty thousand Indian youth enrolled in the various

schools. My limited reading has interested me intensely in the subject, and yet what I shall say centers more about the universal principles of teaching than in any immediate experience of my own with the Indian.

Meanwhile, I wish to congratulate the Department of the Interior and especially the Commissioner of Indian Affairs and the Superintendent of Indian Schools, not only upon the results already achieved, but upon the policy that obtains in all their work.

The teacher's responsibility to the Indian child is determined first, by the child himself; second, by his environment; and third, by his prospective career.

First: The child. You fail to meet your responsibility, if your eyes are closed to all that is genuinely characteristic in the Indian—his ancestry; his physical and mental inheritances; his splendid physique; his racial instincts; his fondness of fresh air, freedom, and activity; his pride in feats of strength; his patience in hunger, thirst, and cold; his fortitude in danger; his artistic temperament; his inborn distrust of the whites; his hatred, suspicion, and revenge. First, know your child and all his racial and individual experience. There is your starting-point. There is your first responsibility as a teacher, whether you labor among the pale faces of our modern cities or among the copper skins of the reservation.

Second: His educational environment. This includes all those conditions under which the process of education must proceed. Your pupil is the child of a defeated race, crowded to the frontiers and waste places of our American continent by the onward march of a conquering civilization. The environment of your child is still an Indian village, the primitive forest, the untouched plains, or the ravaged reservation. As long as the mind of an individual and a race is developed by its responses to external stimuli, education must begin with environment. There is the first teacher and we do well to build upon what we find there. All education of the Indian must find its setting in field, forest, and stream; in tribal laws and customs; in the traditions, habits, and instincts of a race still in a stage of primitive development. If you proceed to impose upon him the trimmings of a white man's civilization, if you destroy his racial comfort, break up his customs, stamp out his native and rude occupations, if you rob him of his language, art, literature, and religion, there is danger that you remove the foundation and source of his old life and slaughter his very soul before he finds the new life, all for a mongrel education aiming at a caricature of a white man. In all your labors, ever keep in mind that you cannot transform your Indian by the wave of the hand into something other than an Indian. You cannot take a first-rate Indian boy, crop his hair, give him a modern bath, and make him into anything more than a little cleaner Indian. You cannot teach him industrial education, for example, by compelling him to throw aside his native occupations for a Morris chair or a Wernecke bookcase. You cannot teach your Indian maiden domestic science by abolishing all traditional dishes for Mrs. Rohrer's menus. Begin your carpentry with the tepee or medicine lodge if necessary; your domestic art with the Navajo

blanket; your cooking lessons with the salted pork; your training in English with the early vernacular; your modern art with his inherited ideas of ornamentation; your literature with his rich collection of folklore; your music with his festival and dances; your Christian religion with his ghost dance, the medicine man, and his volume of prayers. This is what we mean by beginning with the child in environment. It means searching for all that is foundational in his life, selecting all that is hopeful and vital in his environment, making that the starting-point, giving it a new direction, finally a new setting, leading to a newer and larger environment.

And now, third: This newer and larger environment. You meet your responsibility to the Indian child only as you lead him consciously and unconsciously into a larger life. The new environment which you set up for him should finally determine your educational aim and fix your responsibility. And here is where I fear of you. Your aim in your work cannot be the same as mine. The standard of your school cannot be the same as mine. The standard of your race, as a whole, cannot be raised in one generation to the social potentiality of an Anglo-American people. This larger capacity that you would realize for your Indian boy is not measured by the achievements of the white man's race. This larger life into which you would lead your people is limited by the race itself and all its inheritances. You cannot undo in a half dozen years what centuries have done. Your courses of study dare not pattern our culture courses. The details of your methods are your own and cannot be outlined for you in seminaries, in teacher's colleges, and schools of education. Your aim cannot be taken from that modern-day humanist, who is forever and ever idealizing on mediaeval and worn-out conceptions of abstract culture and discipline. The measure of your success cannot be taken from the ability of your children to pursue our intellectual programs and pass our final examinations in academic courses. If you are in earnest about Indian education, you will not imitate the schools of the white aristocracy, but you will recognize that your own succeed just to the extent that you focus your activities upon the concrete needs of the Indian children.

Just here I am constrained to congratulate you. You are forcing us to change our methods. Nothing has so much modified the theory and practice of teaching in the public schools of this country as the manifest needs of the Indian, the negro, and the lagging half of our own people. They have forced us to democratize, socialize, and industrialize our whole educational system. It is the needs of the under half of our society that have called for industrial schools, parental schools, training schools, farm schools, ungraded rooms, gymnasiums, school gardens, medical inspection, and the scores of arts and crafts, occupations and industries, the games and plays and activities that now make up our daily program.

It is gratifying to follow this movement toward vocation and life that is to bring more and more of genuine opportunity to your people and mine. Our systems of education will not reach their fullest development, except in the

continued evolution of a democratic aim in education to the extent that nothing shall be negligible in the investigation of the individual needs of all children and nothing essential to those needs. I read that there are forty thousand Indian children in the United States, and that three-fourths of them will settle down and live their allotted time on the frontiers. Most of them will draw their living out of the soil. Some, an increasing number, perhaps, will enter the ranks of general labor as miners, ditchers, lumbermen, ranchmen, railroadmen, and so on. Your responsibility, teacher, consists in offering to these children the best possible training in view of the life that waits them. It is training, not learning, that they need. It is not for you to idealize or theorize. Approach your problem fairly. Face actual conditions; measure actual needs. There is no need of experiment. You fail if you offer to the primitive child of the frontier nothing more than an academic or classic education.

To my mind the ideal school for the Indian is now being evolved. It is not Hampton, or Carlisle, or Haskell. It is a child's school, not the technical school for the adult Indian. On the other hand, it is not the non-reservation nor even the reservation boarding school which breaks up the family life—one of the most vital and saving factors in the elevation of any race. It is not even the present form of public school, with its academic course's limited equipment, effective as these schools have been in American civilization. Nor is the ideal school an institution so free and easy as to feed and clothe and lodge an Indian, or cultivate a spirit of dependence and pauperism, in order to force upon him a modicum of learning which he does not want. The most efficient Indian school of the future will come with the development and extension of the Indian day school, a school in charge of an efficient man and an efficient wife. First, a little cottage, a model home, setting an example of efficiency in home living; then a small schoolroom, a real wholesome parental school, whose literary program is subordinated to the activities that touch the house, the adjoining shop, and the little farm near by. One-half the time of every Indian boy spent in shop, garden, or field; one-half the time of every Indian maiden spent in kitchen, dining-room, bedchamber, or garden. Multiply these unique institutions, the Indian day schools—elementary industrial schools—on every reservation and in every Indian village and you extend the largest opportunity to a stricken race. Then let the government issue a proclamation commanding and compelling every able-bodied Indian to work out his own salvation or be subject to the laws of vagrants and vagabonds; issue a decree compelling every Indian father to support his family and furnish books, board, and clothing to every mother's son and daughter; pass a law compelling the attendance at some school until children have mastered the essentials of a practical, elementary education, and then follow up all your decrees and laws with armed compulsion, if necessary, and you will have met your responsibility to the Indian child.

CHARACTER-BUILDING—THE FOUNDATION OF EDUCATION

JOHN H. PHILLIPS, SUPERINTENDENT OF SCHOOLS, BIRMINGHAM, ALA.

I wish at the outset to disclaim any qualifications based upon experience to address the members of the Department of Indian Education. But, while I have had no experience whatever in the education of the Indian, my long experience of thirty years, in close proximity to the educational and economic problems of another backward race, enables me to realize more fully some of the difficulties encountered by those who are engaged in the noble work of uplifting a race from barbarism to civilization.

The chief weakness of our American public-school system lies in the demand for uniformity. The want of flexibility and power of adjustment to the varying needs of childhood are nowhere more conspicuously demonstrated than in the application of the matter and method of the traditional school in the education of alien or backward peoples.

That school education must be adapted to the needs of the child; that the instruction in matter and method must be adjusted to the requirements of the taught, is an educational principle that has become trite from frequent repetition. I must assume that those in charge of Indian education have been more successful in the application of this principle to the education of the Indian child, than we of the South have been in our efforts to apply it to the negro child.

Traditional subjects and traditional methods have become so entrenched in American education, that it is difficult to secure such variations and modifications as will effectively adjust the instruction to the capacity, the environment, and the economic needs of the child. Such adjustments are impossible where the craze for statutory uniformity deadens all initiative. To subject all communities regardless of conditions to one common course, and to place all the children of the state, urban and rural, civilized, semi-civilized, and savage, in one common educational mold, may be beautiful in theory, but it is unscientific and impractical.

In our democratic civilization the conception of justice is generally based upon the idea of equality. With equal rights, equal privileges, and equal duties, there must be equal laws and impartial administration. This equality assumes identity of inheritance and hereditary processes, identity of intellectual and moral capacity, and identity of economic needs and conditions. This misconception of equality has led to many absurd conclusions, political and educational. After centuries of contact with inferior races, we are just beginning to learn the important lesson that the negro, the Indian, and the Filipino are not merely Anglo-Saxons with colored skins. Each is the product of distinct and radically different psychological processes. The historic consciousness of each differs from that of the others, in proportion to the difference in distinctive race processes. Between the historic consciousness of the Indian

child and that of his Anglo-Saxon teacher, there must be a chasm as wide as that which exists between their respective civilizations.

It will be accepted without question that the ultimate aim of all school education, whatever the race, and whatever the immediate and intermediate ends may be, is the development of character. It has required nearly twenty centuries of development to bring the Anglo-Saxon people to its present stage of civilization. Yet we indulge the Utopian expectation that a backward race, without historical perspective, may in a few years be forced to span the chasm represented by these twenty centuries of evolutionary processes, and be enabled to maintain a civil and moral status equal to that attained by the older civilizations of the earth.

I assume that the development of character according to our highest American ideal is the chief function of the Indian school. In order to accomplish this result, the school must, at least in some measure, restore to the race the essential processes of development that it has lost during the long centuries of its intellectual sleep, and provide mental and moral equivalents for the evolutionary processes and race-culture elements of which it has been deprived during its past history.

My experience, so far as it has any value, has convinced me of the fact that whatever is to be accomplished thru the school for the uplift of our backward races must be begun in early childhood. With the negro, this is peculiarly true, and I assume that it is also true of the Indian, and indeed of all backward peoples. In the children of these races, the period of infancy is less prolonged than it is in the children of the Caucasian race type. The child matures physically and mentally at an earlier age, and the period of acquisitiveness and of intellectual growth is correspondingly limited. These children are more mature physically than white children of the same age. But the mental development is prematurely checked; the early closing of the brain sutures causes the arrest of brain growth and they remain thruout life mentally and morally in a state of comparative childhood. The instruction and training received after twelve or fourteen years of age generally exert little influence upon the moral character of the individual. Habits of life have become crystallized and tendencies have become established; brain development has been permanently checked and the higher faculties have become inactive. Whatever of training is received after this period is apt to remain simply as a veneer, a sort of superficial gloss. It is possible for the adult to acquire by imitation somewhat of this external culture, but invariably, in case of strain or emergency, the lower automatic habits easily break thru and assert their dominion. The artificial acquirement cannot resist the force of automatic habits reinforced by hereditary instincts. The inhibitive function of the will is not strong enough to hold the active lower impulses in restraint.

It is evident, therefore, that children of these backward races should enter school relatively earlier than our white children. Kindergartens and nursery schools, as well as primary schools, should be provided at an

age much lower than that usually prescribed as the minimum by our state constitutions.

It is also evident that these schools should provide practical instruction and training in moral and industrial habits; such habits must be continued so that they may become automatic before the period of brain arrest is reached.

Imitation in itself possesses little of real value at any stage of the child's development. There must be a worthy end, self-direction, and purposeful effort. His activities must at first be on the plane of the material and must deal primarily with the concrete and the objective, both in matter and in method. The appeal at the beginning must necessarily be to the lower motives of self-interest, and the incentives must be such as to inspire mental as well as physical effort. In addition to this, the instruction and training should be such as to develop habits of skill and industry which may find their natural and legitimate exercise in the practical world of the individual and of the race. That education which unfits a man for the farm and fails to fit him for anything else is, to say the least, a questionable attainment. The primary traits that the school is expected to develop are industry, frugality, thrift, self-support, and self-control. These elements of character are fundamental to progress and development in those moral and civic virtues that must characterize a useful member of society and a citizen of a republic.

WHAT EDUCATION HAS DONE FOR THE INDIAN

H. B. PEAIRS, SUPERINTENDENT OF HASKELL INSTITUTE, LAWRENCE, KANS.

The Indian is human. What he has been and what he is now should be attributed, to a very large degree, to what his environment has been and what it now is.

The older Indians, even, have progressed as their environment has been changed for the better, and yet the great change has been among the young people. Education and training have been the effective factors in this process of evolution. After all, environment is largely a fruit of education. The schools are, in general, doing excellent work and are attaining satisfactory results. For years good schools have been provided in which the Indian children can and do have excellent opportunities for head and hand training and in many places good opportunities for heart training. Millions of dollars are being expended every year in the government schools for Indians and approximately three-fourths of all Indian children are in school. For all of this the government should be commended. Certainly to those who are intimately connected with the work there is in the lives of the splendid Indian young men and young women, such as we have present here today from Grand Junction, Haskell, and others, results commensurate with all expenditures made. We might go on patting ourselves on the back and congratulating ourselves over results, but sometimes we need to have pointed out mistakes and shortcomings as well as success. As the editor of the local paper said of the

Hiawatha drama as given by the Haskell boys and girls, "The good was infinitely more in evidence than the bad;" so it has been and is now in our Indian school work which, in my judgment, demands our serious and thoughtful attention.

Physically the Indian is weak, poorly developed. To the best of my knowledge the government has never done anything regularly and systematically toward building up and developing the Indian child physically until within the past year. Thanks to the medical profession and to the Commissioner of Indian Affairs, steps have been taken not only to stamp out disease already existing but to prevent further infection. Of this Dr. Murphy has spoken, but I want to make a plea for proper physical training of the Indian youth. What will the Indian boy or girl whose physical welfare has been neglected be worth to the nation, to the state, or the community? Such an individual must soon become a burden rather than a useful citizen. We cannot afford longer to neglect the physical welfare of the Indian. We have already said that the hand and head training of our Indian youth is along intelligent lines and is exceptionally commendable. But few if any boys and girls anywhere in this country have as good opportunities. Granting this, and hoping for a more intelligent and systematic effort for physical training as an outgrowth of the present campaign against the spread of tuberculosis and trachoma, as well as the closer supervision of sanitary conditions, there is still another feature of the school work which needs the most careful and serious attention of everyone.

Moral and religious training are the foundation stones of character-building. Neglect these lines of training and, no matter how thoroly hand and head may be trained, the Indian young man and young woman, in fact any young person, is in danger at all times. The Indian schools are not giving as much attention to moral and religious training as should be given. There is but one church that is really taking advantage of the opportunities offered for this line of education and training—namely, the Catholic. Other denominations should awaken to the opportunities offered, especially in the school, for carefully instructing and training the Indian children along the moral and religious lines and thus supplementing and aiding the government in the work of preparing the Indian youth for Christian citizenship.

Briefly summarizing:

1. Improve the home environment as rapidly as possible, make it the business of those employed to look after the home affairs, to keep constantly in mind that environment is the greatest influence for good or bad and therefore must be constantly improved. Crowd civilization in upon the evil influences of the reservation and thus force, if necessary, a better environment.
2. Continue the thoro hand and head training that is now being given.
3. Arrange to give careful, systematic, intelligent, physical training.
4. Insist upon careful moral training being given in the schools by example of employees and by systematic instruction, and encourage careful, intelligent, religious training.

AGRICULTURE

A demonstration lesson was presented with a class of Indian pupils by Miss Maggie Harper, teacher, Haskell Institute, Lawrence, Kans., showing the manner in which agriculture may be correlated with the literary instruction in the classroom.

MISS HARPER: In teaching the subject, agriculture, one may profitably combine the reading, composition, and other classroom studies. It is the duty of the housekeeper to supply her table with nourishing food for the various seasons. This is the secret of successful housekeeping, and to accomplish this a knowledge of agriculture is necessary. Therefore, the subjects, agriculture and cooking, are interdependent.

To insure success in correlating subjects in the classroom, the lesson must be logically and clearly presented to the pupils; for example, if the lesson is bread-making, as it was yesterday, the appropriate correlative would be wheat, including, where practicable, a visit to the wheatfield to observe the planting or growth of the crop, or a series of visits to the harvest field, the granary, and the flour mill, followed by experiments in the classroom with sprouting the grain, careful observation of its appearances at different stages of development, and a study of its food values.

The subjects will vary at different schools; teachers in schools not in a wheat country must adapt the lesson that is practical and teach subjects of local interest.

Teachers, you will see that this is a composite lesson representing months of study. This is given to demonstrate how broad the subject is, and how a little given each day becomes of practical value.

[Here followed a series of questions by the teacher and answers by pupils illustrating the classroom education in agriculture at the Haskell Institute.]

MORAL TRAINING

BEN B. LINDSEY, JUDGE OF THE JUVENILE COURT, DENVER, COLO.

The topic assigned me for discussion this morning appears upon the program under the title of "Moral Training." There is certainly no more important subject to occupy our attention. I presume that I am given this honor upon the theory that the children's court being a sort of clearing-house, as it were, for the troubles of childhood, we ought to know something about it; and yet I sometimes doubt whether we know as much as we ought to know. I have found it one of the most difficult subjects to deal with. It is hard to lay down any rules in discussing so important a subject. I have long come to the conclusion that all children are frankly and innocently unmoral. The child takes what he wants at the beginning of his life, in the development of his conscience; he takes what he wants if he can get it, not because he is an embryonic thief, but because, my friends, this is nature; not human nature, but nature itself, and I think we have found that nature is seldom altruistic. The normal child is merely a healthy little animal to start with, and we must remember always that his morals develop, grow with his growth and strengthen with his strength, only when he is guided in the right direction. Therefore, my friends, it being the duty and responsibility of the parent and the teacher, we have a right to assume that when the child is immoral after that period of care and development that should have been a part of his life, the trouble must have been, not so much with the child, consequently we must put the responsibility where it belongs—upon the home and the school and the church. These three

great institutions are responsible for the morals of the child largely; they are responsible for the direction of the child. In the home, the school, and the church the child receives that precept and teaching that is necessary in the development of its character; but, my friends, I have found in my own experience that this precept and teaching counts for little unless it is accompanied by example. This example must, of course, be in accord with the teaching; it must be furnished not only by the parent and the teacher, but also by the citizens of the community. And I would go farther, and say that it must be furnished by the community itself—by the public officials in the community.

I recall very well a typical little gang from the Delgany District, down among the railroad tracks and bottoms, in Denver. This gang was made up of eight or ten boys, bubbling over with surplus energy, much misdirected; and finding it encroaching upon box-cars, and eventually the corner grocery, it had to be stopped. I remember a certain little fellow, the leader of this gang, who cross-examined the judge one day, somewhat to the judge's embarrassment. We were all seated around the table, talking in that chummy fashion that boys will talk in the alley when we can bring out their natural feelings and thought about things in general, and upon occasions like this I have been somewhat amazed and shocked at the observation of the child, and the impressions made upon his mind by the acts and conduct of men. Well, while we were sitting around the table chatting, little David, we will call him, suddenly said to me: "Judge, if old Britt, that runs the saloon down in our neighborhood, can keep open all day Sunday and stand in with the police, and the cop sits out on the beer keg and don't 'pinch' him, why can't the kids swipe then?"

I was so impressed with this unconscious indictment of the community by this boy that I called in Mr. Myers, a stenographer in this city, and had him take down the question of the boy, but I must say it was very difficult to have him take down the answer of the judge.

My friends, we are all more or less responsible for the bad example set for the child, as citizens, as parents, as teachers, even as public officials. I once had some newsboys in court. They were pursued for "shooting craps," as they call it. With them I found again this unconscious observation on the part of the child and its influence upon the child. One of them, who is well known in police circles, in a similar gathering in my chambers one evening said this: "Judge, I can take you down on Curtis Street any night and show you a lot of fellows gambling in the Cottage Club, and the cop stands outside and doesn't do a thing, and why can't we shoot 'craps'?" And why not? Of course, my friends, these evils and difficulties are more or less common in large communities, but happily I hope are passing away in this community after a more enlightened administration. I am speaking rather of past experiences, as illustrating the effect of bad example in the community upon the child. I could cite you an infinite number of such cases wherein the state learns the lesson from the child thru that companionship that develops a sort of confidence when you can get the true impressions reflected back from the heart of the

child, impressions put there by men and women who have been traitors to childhood's sacred cause.

So it follows if we are going to teach morality successfully we must take heed, I think, of the very homely truth expressed by Mark Twain: "If you would train up a child in the way it should go—go that way yourself." We must do this if we avoid the indictment of the little twelve-year-old when the old deacon came to die. Everybody in the neighborhood was inquiring as to the deacon's chances when they began to post bulletins. At four o'clock on the eventful day, the first one read: "The deacon is sinking rapidly;" about an hour later a second bulletin read: "The good deacon has gone to heaven;" then the twelve-year-old American boy shocked the neighbors with this final bulletin, which read: "Great excitement in heaven—the deacon has not arrived."

My friends, that boy knew that the deacon's example had not squared with his precept, and if you think boys and girls are not observers you are mistaken. They are the keenest observers in the world, and they have the keenest sense of justice, and the minute your example does not square with your precept your whole teaching becomes a farce; it is met with scorn by the child and he prefers to follow the ways of wickedness rather than righteousness, because he believes you lied to him. That, my friends, is one of the chief difficulties in the training or in the instilling of morals into the children of this country. We do not go that way ourselves. We ought to.

The child feels unconsciously the effect of the business world. Once I went into the newspaper alleys of Chicago to interview the newsboys; I talked to them; I became chummy with them. I was confident that their testimony that I sought to get would be as frank and as honest as would be their conversation with their best chums. And every one of those boys told me that every boy they knew would steal, if they thought they wouldn't get caught. I am not saying that is true. I have not come here with any indictment against the child. If I have any indictment, it will be against men and women who have been responsible for childhood.

Now, my friends, those boys knew of a commercial warfare going on between the newspapers in that town. They knew that those papers would do anything vile and dishonest to beat the other fellow. They knew they didn't hesitate to lie; they knew that in this competitive warfare they didn't hesitate to murder men, because those boys knew more than one man had been killed in this fight; they knew that these men would stop at nothing in these fights for power and money. They would tell you about it if you would get their confidence. Perhaps the average observer thinks they didn't know anything about it, but they knew all about it; they know what goes on; they know of the fierce competitive wars in which morals are valued at so much less than they ought to be, and I have come to the conclusion that example, combined with a certain false teaching that comes from the home and the school, was largely responsible for these answers that I not only received in

Chicago from the boys in the street, but in four other cities—it is not necessary to mention them. In four cities I made the same experiment with the boys from the public school in the seventh and eighth grades, and here were their answers—if I remember correctly. I put them down as they came from the lips of the boys, and these are examples of 90 per cent. of all the answers I received: “Nearly all the kids I know swear.” “Most all the fellows will lie if they think there is no proof and they can get out of it that way.” “Over half of the kids in our school will steal if they get a chance and they think they won’t get caught.” “All the kids I know talk bad things, tell dirty stories, and boast about things that most of them never did, but they think it is smart to say they did, and some kids I know have.”

I once quoted what these boys said and a very worthy gentleman in the pulpit came out in the pulpit and said that all boys were liars and thieves. I doubt if that gentleman came thru his life and boyhood without lying or stealing something. We will not have a “snitching bee,” as the boys call it, here this morning, for I don’t want to be in it; but I want to ask you how many men can say they passed thru their boyhood without being technically guilty of any one of these offenses? That is a part of the weakness of human nature. Its occurrence and correction is a part of the method of strengthening and building character. These boys were frank and honest, and it was in their favor. I do not believe that these things are of chronic occurrence among the children of this country. If, however, one of these misdeeds becomes chronic the state is certainly preparing to reap a criminal rather than a good citizen, and that is why it is necessary for the home and the school to be constantly on guard.

Now, my friends, before closing, in discussing this tremendous subject, upon which I can only dwell a few minutes, I want to urge one or two practical things. I have found in our court work that nothing helps more than the little talks with the children. Sometimes these talks are better delivered in private; in fact, I should say in most cases; sometimes with the children all together. I should say it is more important to have frequent talks upon such subjects concerning morals than to teach grammar, arithmetic, or geography. I have just been advised that in California they have passed a law requiring such teaching in the schools. Now, among the subjects I would recommend would be these, which I have selected at random for the probationers in our court, who report every two weeks when we have report day, and it opens generally with a talk on a subject like this: “Our Duties to Each Other;” “The Absurdity of Hate;” “Truthfulness;” “About Quarreling;” “Usefulness, Gentleness and Kindness, Mercy and Charity;” “Money and Manhood;” “Evil Associations;” “Evil Thoughts;” “Evil Talk;” “Jealousy and Envy;” “I Forgot;” “What is Success?” “The Man Who Serves and the Man Who Makes Money;” “Public Service;” “A Pure Life.”

Children will not tire of these subjects if properly presented, but do not forget they must be properly presented. For instance, upon our duties to each other, I might give the topic upon which it is discussed, “Snitching—when to

snitch and when not to snitch." The boys understand that; they are aroused at once to a high pitch of interest.

Now, my friends, in closing I want to emphasize this point—that the child is moral just in so far as he is strong—do not forget that; just in so far as his character is developed. Character comes thru conscience—do not forget that—and conscience comes thru the development, not of the mind or of the intellect, but conscience comes thru the development of the human heart; and until we reach the heart of the child, until we can teach him to do right because it is right, and not because he will get in jail, we are not going to have a morally strong boy. I have reached the conclusion it is a mistake for a mother or a teacher to say to the child: "If you do that the police will get you; you will get in jail; I will turn you over to the police." You are more than likely storing up possibilities of a criminal when you do that; you are basing all your teaching upon fear and are teaching that boy in innumerable instances a lesson often seen in the business and commercial world—"Steal all you can, cheat all you can, so long as you don't get caught." Avoid that in your teaching of children. Of course, it is important to hold up the consequence of evil-doing, but too often the child in his tender undeveloped mind misunderstands, and makes his motive to avoid punishment, and, my friends, that is not the right motive for righteous conduct.

Yesterday morning some of the teachers were in our court, and I had to send a twelve-year-old boy to the reform school. His mother said in the presence of those teachers that he would not go. Well, he was a run-away; technically, he was a thief; he was incorrigible, and he was considered hopeless. What was the trouble? Weakness. Now, why did that boy go alone to the reform school? We got a telephone message this morning that he had arrived. We seldom ask whether they get there or not; we are certain they will go. Why did he go? Because he was strong enough to last one day. If I had said to that boy, "One week from today you go to the reform school," he would never have gone. If I had said to the last burglar I sent to Buena Vista prison—two hundred and fifty miles from Denver—whom the policeman had to put chains on, "Bill, you take your papers and this \$12.50 in cash I give you, and one week from today you take the train and travel two hundred and fifty miles, get off the train, face the great stone walls of that prison and ask the man on the tower with the rifle to shoot down those who come out to let you in," he would not have done it; but when I said, "Bill, you take the train, travel two hundred and fifty miles, get off the train and ask the man on the tower with the rifle to shoot down those who come out to let you in; I will like you for it, because I know you like me, because I know you believe in me. I know you can do it, Bill, *if you do it tonight*, but if you do it next week, a pal you are running with will tell you not to, and you're not strong enough to resist the temptation to do it. If you can only go tonight, you will go." And Bill takes his papers, as every prisoner has done that I have thus sent there, travels two hundred and fifty miles all night, gets off in the gray dim light of the early

morning, goes out into the country to the prison, and faces the man on the tower with the rifle to shoot down those who come out to ask him to open the gates and let him in.

Now, why did we adopt the system of not sending a policeman or sheriff with these boys? Because we have recognized this great principle—that crime and immorality is a matter of strength and weakness, rather than viciousness or meanness, and our fight has been to make the youth strong, so strong that he can resist temptation not merely for a day or a week, but forever.

DISCUSSION

G. W. CROSS, principal of Tohatchi Indian School, Tohatchi, N. Mex.—The most important subject before the American people today is the proper education and training of the child. The child of today becomes a citizen of tomorrow. The future citizenship of this country will depend largely, and I might say wholly, upon the kind of training we give to the boys and girls of today. We all believe in America; we all believe in American manhood and American womanhood; we believe the perplexing conditions and problems that now confront us will be met and solved; we believe that the future generations will experience a greater degree of liberty, a more substantial progress, a higher state of civilization, and a nobler type of manhood and womanhood.

Notwithstanding this optimistic view in the hope of the future there is a dark side to the picture. Many of our leading educators, men and women who have given serious thought to the question, are of the opinion that crime and immorality are growing worse in this country. If this be true, there is something seriously wrong with our system of education; or the ones who are entrusted with the sacred duty of educating and training the child are at fault. One thing is sure, the fault is not the child's. "Train up a child in the way he should go, and when he is old he will not depart from it" is just as true today as it was in the days of King Solomon of old.

In this country we have three institutions that have to do with the training of the child—the home, the school, the church. If these three institutions properly perform their functions, the child will be properly trained.

This subject demands our deepest thought. It should marshal to its support our best men and women, our greatest minds. Here is common ground on which all can meet—the poor man and the millionaire, the man who lives in the palace and the man who lives in the hut, the parent, the teacher, the churchman, the patriot, the statesman, the philanthropist. Here is a common field in which all can labor side by side; for the training of the future American citizen, be he red, white, or black, is equally important to all.

One of the requisites looking to the training of the child, and in my opinion the most important, is the proper environment. I desire to make a special plea for the most favorable condition in which to bring up the child. The child needs a wholesome atmosphere in which to grow. The child has a right to be guided, has a right to be protected, has a right to be happy. I would give every child a Christian home, a home that has in it love, sunshine, and gladness. I would give to every child, regardless of race, color, or nationality, the benefits of a good school, conducted by men and women of the highest type of character, men and women who love their work and appreciate its importance to the state.

The difference between the Indian child and the white child is one of environment and training, and not of soul or faculty of the mind. The question of moral training in the Indian school is fundamentally the same as it is in our public schools. In the first place we must give the Indian child a proper environment. To take a child out of his native environment and create another for it, to tear down the ideals, customs, and beliefs of his ancestors, and substitute something entirely new and foreign in its place, without

crushing out all that is good and manly in his nature, is a problem that deserves most careful study. We should seek out all that is good and elevating in the home life and environment of the Indian child and build upon it. We find many beautiful customs and teachings, legends, songs, and folklore among the different tribes that will give us a starting-point—something upon which to build.

The Indian is very religious; he worships the Great Spirit, prays to the clouds, the skies, and the lofty hills. He has his sacred mountains upon which he goes to pray. Does this not remind us that the chosen people had their holy mountains and that the Savior was wont to go into the mountain apart to pray? We pray for ourselves; the Indian prays for himself. We pray for friends and relatives, so does he; we pray for our country, the Indian prays for his tribe. I will venture the assertion, with all due respect, that the Indian comes as near living up to his religion, his ideals, and his beliefs as we do to ours.

If we would help and guide the Indian we must understand him and measure him by his own standards; we must have a clear idea as to what we want him to become. If we want him to be a good Indian, we have ample reasons for believing that we can help him to become such. If we want to transform him into a white man, I fear we shall fail. What does it matter whether the Indian wear his hair long or short and whether the Indian women wear squaw dresses or dresses made according to the latest styles, so long as they are honest and law-abiding citizens? Is it necessary for the Indian to give up his religion, his customs, or his traditions, in order that he may become a good American citizen? I will answer. His religion should be improved and elevated; all his customs that are not positively harmful and debasing should be left alone; many of his traditions should be preserved and handed down to future generations.

What can we do toward moral training in the Indian school? We can teach by example. Our conduct, habits, and manner of life will have more influence over the child than all the preaching we can do. His idea of white man's civilization will largely be based upon his idea of the men and women who are sent out by the Indian Office to instruct him. The Indian child is a close observer; he notices any peculiarities in speech or manner that we may have. The adult Indian watches us closely; he compares our way of living with his own, and then asks the question, "Wherein is the white man's way of living better than mine?" Often when we have convinced him that the white man's way of doing things is better than his own, he advances this argument: "That is all right for the white man, but won't do for the Indian; the Great Spirit made the Indian different." We must convince him that what is good for the white man is good for the red man, and what is bad for the white man is also bad for the red man.

In order that we may be able to reach the Indian child we must gain his confidence. We must convince him that we are his friends, that we are striving to help him. It is impossible to gain his confidence if we hold ourselves aloof from him and act as tho we were afraid to touch him; and withhold from him our love and sympathy, which of right is the child's. I believe in making the school pleasant and attractive; it should be more than a school, it should be a home; the home atmosphere should be apparent. There should be ample time and means for amusement; there should be playgrounds, outdoor games, and indoor games; athletics should receive proper attention and encouragement.

The classroom teacher should give instruction in morality and right conduct. She will have at her command the stories from the school readers, the noble characters of history, and the legends and traditions of the tribe.

The larger boys and girls should have instruction along the line of sex in its relation to the home and in its relation to society and the State. The matron can, indeed, be a mother to her girls, giving them timely and wholesome advice and training in this—the very foundation of the happiness and well-being of the home.

Discipline in its broadest sense is one of the chief instruments in character-building; discipline should be firm and kind, not loose or spasmodic. The child should know the

reason why it is being punished. The one who disciplines an Indian child should never scold or lose his temper.

Some features of the "school city" might be used to good advantage in our Indian school, in fact, are now being used in some of our schools with the best results.

Our Indian boys and girls should receive careful religious instruction; the Indian Office has made most careful provision for this feature of the work. The missionary in the field is given due encouragement and support.

The government is a good friend of the Indian boys and girls. It is spending large sums of money annually to educate and prepare them for citizenship. The present Indian policy is wise and business-like. The present administration of Indian affairs has been progressive all along the line. With proper co-operation in the field we expect the very best results. We believe that the money now being spent on our Indian boys and girls will not have been spent in vain. We believe it a much wiser policy to spend the money on our boys and girls in training them for good citizenship than it is to neglect them for want of it and spend it prosecuting them as criminals later in life.

THE PRESERVATION OF ABORIGINAL ARTS

A. J. FYNN, PRINCIPAL, LONGFELLOW SCHOOL, DENVER, COLO.

Conservation is the watchword of the hour. In the midst of rapidly increasing wealth, gigantic business enterprises, territorial expansion, and commercial development, the thoughtful people of the country are pausing to reflect on the debt of Americans to America. The prodigalities of the past, the indiscretions of pioneer days, are already haunting us as we look reflectively outward toward the welfare of posterity. We turn to the remnants of the swiftly vanishing forests at our right, the poverty-stricken soil at our left, and the rapidly disappearing minerals at our feet, and earnestly ask what our duties are toward the preservation of these and various other great agencies of civilization, general and local, which the centuries have handed down to us and intrusted to our care.

Again, we are turning to the basements and the attics of our homes and bringing out the stained, the battered, and the faded heirlooms and long-forgotten antiques, the solid worth of which we appreciate today as never before. These fabrics and wares are dragged from the dark nooks and corners and given a place of honor; and we wonder how it has happened that they have been so long neglected.

Since we have been careless and negligent regarding the valuable and sacred productions of our own people, it is not surprising that we have been even far less appreciative of the merits of those whom we are accustomed to rank as inferior people. Race prejudice, religious intolerance, and false ethnological notions have been busy agencies in wasting and destroying invaluable art creations and simpler handiwork of our aboriginal tribes. No Prescott is needed to describe wholesale destruction of native antiquities. The world knows the story. Every antiquarian and ethnologist of America has blushed at the vandalism that has gone on for years almost within a stone's throw of the city in which this Association is assembled.

Equally mischievous is the notion that the products of a simpler race must

necessarily be inferior products. There is a possibility, sometimes a strong probability, that the opposite is true. If we search for evidences, we will find that, again and again, the native handiwork of the masses will stand out as particularly meritorious in contrast to the tinsel and show, the hastily made, mechanically made, poorly made products of the more pretentious classes. In the one there are the unmistakable marks of native industry and genius, in the other the easily recognized trademarks of the commercialist. In America it has been self-evident that when the conqueror came upon this soil to destroy the aborigines, or to force upon them a civilization, the hostile spirit of the battlefield sustained the customary contempt for aboriginal arts. There was little respect given to the acquirements of so-called pagans, however noteworthy those acquirements might be.

At the eleventh hour, however, a change is coming over the spirit of our dreams. Encouragement is given toward a return to the old arts and crafts of the natives. There is special fitness in such a movement. These people, when not distracted and misled by the gaudiness of the Caucasian autocrat, are naturally interested in the arts practiced by their own ancestors. The Indian has a natural inclination toward such work. Thru long training he has acquired a skillful hand. His outdoor life and the nature of his occupations make him a keen observer. He excels as an imitator. All these emphasize the adaptability of the man to this kind of occupation.

That there are many productions among these people which are far from artistic no one will question. In many cases the results are childish and hideous. We should, however, look upon the aesthetic accomplishments of this race as we look upon those of the Chinese or of the Turks, recognizing points of excellence and making due allowances for defects. Is not the simplicity of Japanese art, with its few strokes, its suggestiveness, in many cases its very faults in the way of perspective and atmosphere, of great value to us? We learn from these people that important effects may be produced in ways different from those to which we are accustomed, that our way of doing things is not the only way, nor necessarily always the right way. We come to realize that there is a spontaneous native art as true and valuable from the standpoint of culture as is our more affected civilized art.

Closely associated with this thought is the significant fact that a certain locality frequently originates and fosters a unique aesthetic individuality. A characteristic object of a district, whether the object happens to be animal, vegetable, or mineral, may influence or determine the whole style of art of that district. Take from ancient Egypt the lotus as a model for ornamentation, and the whole body of aesthetics along the Nile becomes so changed that it is hardly recognizable. As an ornamentation, this plant has been considered one of the most beautiful of any age or of any people. It becomes still more interesting when studied from the standpoint of religion and symbolization. Indeed its influence reached very far down into the whole life and development of the people.

Over among the South Sea Islands, the preponderance of marine forms among the rude arts of the inhabitants is especially noticeable. To people always in contact with the ocean, what else could be expected? Even the most common articles, for instance the shafts of arrows and the bowls of tobacco pipes, are thickly decorated with innumerable forms of the serpents and crocodiles abounding in those regions. To the north of these islands, the ever-visible sacred mountain of Japan and the never-failing presence of the dragon of China emphasize the influence of suggestion and environmental relationship.

Following the same belt of latitude to America, we find the alligator, the same species of animal that was found among the Pacific islands, directing the art forms of our aborigines for thousands of miles along the two tropical shores of the Americas. In the less cultural regions, monstrous shapes of this ugly animal appear, and in those shapes may be traced the dread and superstition with which the natives looked upon this life-destroying creature. Comparing locality with locality, and older representations with newer, one cannot fail to notice a significant artistic development. The animal becomes changed, conventionalized, and beautified until the ugliness disappears, and only the faintest traces of the original remain.

But there are many other places in America no less noted for unique designs and exquisite workmanship. Let these native handicrafts be energized. Let the localities in which the environments especially encourage certain industries become still more famous for the excellent articles produced. In the land of the Moqui and Navajo, the land of sunshine and sheep-herding, let them continue to make the blankets, belts, and scarfs which have become noted thruout the land. Let them go on weaving their artistic designs, weaving their religious conceptions, weaving the history of their people, weaving their modes and manners, weaving the very emotions of their simple lives, into these famous fabrics. There is not only this aesthetic, this sentimental side to be considered; but what is of more consequence is the utilitarian significance of this handiwork. A great uplift is given to the whole domestic life of the Indian when he makes such goods, puts them upon the market, sells them, and feels that they are a desirable product, a real necessity in the commerce of the world.

The making of pottery is equally as interesting an occupation in this section of the country as is the making of fabrics. The Pueblos are sedentary, and the work of clay-modeling flourishes in the Southwest as in no other part of the United States. Here are the clays, the coloring materials, and all the other necessary natural agencies for the encouragement of this time-honored art. Here the attention of the inhabitants is centered on this industry from the very fact that, on account of the nature of the country, many other aboriginal arts cannot flourish. Here is the eagerly demanded ware which the ancient people left in the ruins of their cliff-homes, the designs of which, originating in the long, long ago, reflect in our far distant times the spontaneity and excellent artistic judgment of the potters. Great will be the loss to the world if the ceramic art of the Southwest is allowed to perish with the present generation.

The skillful older potters are passing away, and there is danger that there may be no worthy successors.

For thousands of miles along the Pacific coast, and extending for a considerable distance inland, is the natural home of the aboriginal basket-makers. When looked at from the standpoint of durability, or of delicacy of texture, or of appropriate design, these products of Indian handicraft cannot fail to win our admiration; and, if a settled value could be fairly well established upon the wickerwork thruout this whole territory and suitable markets arranged for the equitable disposal of the products, a well-deserved impetus might be given to this extremely valuable industry. The number of tribes and bands of Indians engaged in basket-making along this fringe of attractive territory can hardly be estimated. There is necessarily a great variety in style, texture; and material among the baskets produced along this coast, from the hot, dry land of the Pimas to the island-abounding shore of Alaska. The desert, with its wiry bushes and hard grasses, stimulates one kind of product; the forests of the north another. But whether the baskets be medium-sized utilitarian articles like those of the Pimas; or especially large durable ones like those found on the Fraser River, particularly the fish baskets; or the small, tasty, ornamental ones like those on the shores of Nootka Sound, there is no question regarding the merit of the products.

Other industries, such as beadwork in Oklahoma and silvercraft among the Navajoes, could also be greatly extended, and they would add greatly to the dignity and social standing of the individuals of the race. In the preservation and promotion of all of these arts there should be kept constantly in mind the fitness of things. Let there be natural adaptability between environment and product. Some of the efforts of well-meaning officials of days gone by have been as inconsistent in regard to the industrial education of the Indian as would be the establishment of an ice-manufacturing plant at Point Barrow or the erection of snow-sheds on the Desert of Sahara.

A few generations ago the white child who was to get anything beyond the rudiments of an education was sent away from home to the academy or seminary. Now the education is brought to the child. Even the modest village boasts of its high school. More than that, the arts and industries are carried into the common-school curriculum. Let, at least, the same advantages be given to the needy and embarrassed Indian child.

ELEMENTARY INDUSTRIAL TRAINING IN THE DAY SCHOOL

S. TOLEDO SHERRY, DAY SCHOOL INSPECTOR, STANDING ROCK AGENCY, FORT YATES, N. DAK.

With the idea that all Indian education should have for its object the preparation of the children to become home-makers and home-keepers, all our literary and industrial work at Standing Rock is based on a model farm.

This consists, first, of a frame of wood six feet square and two inches deep divided into nine equal parts, representing an ideal plan for a model farm home. After the plan has been drawn and studied and used as the basis for language, drawing, number, writing, and reading lessons, materials are secured and the construction of the frame begun. Every detail of the construction is worked out in the classroom before the actual work is begun. Materials and tools are studied and drawings made of everything. The drawings are made on a scale adapted to the conditions and the advancement of the pupil.

When the frame is completed it is filled with loam, which is prepared for sowing and planting. This completed, a map of the entire farm is made by each pupil in the school. This map is drawn to a scale, colored, and each field properly named. The cardinal points of the compass are then studied from a map of their own making rather than from one of Montith's of South America.

At this stage plans, drawings, and specifications for the various kinds of fences required for the yards and fields are prepared. Then fences and gates are constructed by the pupils and, as far as possible, from materials in the rough. Meanwhile the germination of seeds is being studied and their growth and development watched with keener interest than Indian pupils of their years have ever been detected manifesting in the study of books.

At the end of about two weeks the loam is emptied out and replaced with sand and the planting repeated and studied under the new conditions and the contrasts noted. This process is followed with clay and afterward with soils of mixed sand and clay, sand and loam, clay and loam, in varying proportions; then combinations of all three, and finally, with the best soil obtainable.

Not only does the model farm handled in this way furnish most excellent materials for correlated literary and industrial work, but it becomes a miniature experiment station near their own homes, and under conditions that will prevail when these pupils go upon their own claims and carry out on a larger scale what they have learned to do in the day school.

The model farm above described is for indoor study. This is to be followed by one out of doors thirty-three feet square. This is to be seeded, fenced, and improved with houses, barns, and other buildings as an ideal farm home should be. This out-of-door model is more substantial and requires much more time for its completion as the crops are left to mature. While they are growing a good substantial barn is planned and built. This is followed by the construction of a modern dwelling-house suitable for an ordinary farm home of one hundred and sixty acres.

This miniature experiment station with its little fields of the various crops that should be raised on an ideal farm in this locality is considered one of the very best features of the entire plan, for the reason that it is seen day after day by the pupils, their parents, and other visitors.

After the work has progressed thus far, a field is laid off and space for a model farm for each child, with pathways between, is allotted.

Here, then, is where the pupils do their best industrial work. They are required to sow, plant, and raise everything practical that will grow to advantage in this latitude. They make every tool and utensil, and all the buildings and improvements possible with the tools at their disposal. The model farm is to the future home life of the pupil what the plans and specifications are to the architect—an ideal toward which he is to work. Who shall say that this plan of industrial work systematically and intelligently carried on thru the day school, and supplemented by the boarding schools, will not result in these boys and girls going out on their allotments and doing on a larger and grander scale what they have been trained in the day schools to do?

In the Standing Rock day schools, we are endeavoring to hold up to the Indian boys and girls an ideal of manhood and womanhood that shall culminate in happy, prosperous homes of their own.

DEPARTMENT OF RURAL AND AGRICULTURAL EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—D. B. JOHNSON, president of Winthrop Normal and Industrial College, Rock Hill, S. C.
Vice-President—A. B. GRAHAM, College of Agriculture, Ohio State University, Columbus, Ohio.
Secretary—E. E. BALCOMB, State Agricultural and Mechanical College, Stillwater, Okla.

FIRST SESSION.—TUESDAY FORENOON, JULY 6, 1909

The department met at 9:30 in the First Baptist Church, with President Johnson in the chair.

The program was carried out as follows:

"Agricultural Education for the Rural Districts"—Seaman A. Knapp, Farmers' Co-operative Demonstration Work, United States Department of Agriculture, Washington, D. C.

"Some Means of Awakening and Maintaining an Interest in Agricultural Education"—E. E. Balcomb, State Agricultural and Mechanical College, Stillwater, Okla.

"National Aid in the Preparation of Teachers of Agriculture for the Public Schools"—H. H. Seerley, president of Iowa State Normal School, Cedar Falls, Iowa.

A general discussion followed.

The president appointed the following Committee on Nominations:

E. C. Bishop, Lincoln, Nebr. Dick J. Crosby, Washington, D. C.

Miss Anna L. Force, Denver, Colo.

ROUND-TABLE SESSION.—WEDNESDAY FORENOON, JULY 7, 1909

The department met in round-table conference, under the leadership of Dick J. Crosby, of the United States Department of Agriculture, Washington, D. C., who presented a paper on the subject, "How May the Rural Schools Be More Closely Related to the Life and Needs of the People?"

This was followed by a general discussion, participated in by James W. Robertson, Quebec, Canada; Edward T. Fairchild, Topeka, Kans.; J. D. Towar, Laramie, Wyo.; Mrs. Katherine M. Cook, Denver, Colo.; S. A. Knapp, Washington, D. C., and A. H. MacKay, of Halifax, N. S.

THIRD SESSION.—FRIDAY MORNING, JULY 9, 1909

Owing to the temporary absence of President Johnson, the department was called to order at 9:30 by Dick J. Crosby.

A vocal solo was rendered by Miss Gertrude Griffith, after which the following program was carried out:

"Special Agricultural High Schools"—Dick J. Crosby, United States Department of Agriculture, Washington, D. C.

"The Present Status of Agricultural Education in the Public Schools"—E. C. Bishop, state superintendent of public instruction, Lincoln, Nebr.

"The Correlation of High-School Science and Agriculture"—Josiah Main, department of agricultural education, University of Tennessee, Knoxville, Tenn.

"Agriculture for the Elementary Schools"—Riley O. Johnson, head of department of biology, State Normal School, Chico, Cal.

It was moved by E. E. Balcomb that the president appoint a committee to arrange a tentative course of study in agriculture which would be generally recognized thruout the United States, and report the same at the next meeting of the Association.

The motion was carried and the following committee appointed:

E. C. Bishop, Lincoln, Nebr.

Josiah Main, Knoxville, Tenn.

Riley O. Johnson, Chico, Cal.

The report of the Committee on The Educational Value of Agricultural Study and Securing College Entrance Credit for High School Agriculture was read and approved. On motion, the committee, consisting of

E. E. Balcomb, Providence, R. I.,

A. B. Graham, Columbus, Ohio,

C. H. Robison, Montclair, N. J.,

was continued for another year.

The Committee on Nominations submitted the following report:

For *President*—Kenyon L. Butterfield, president of State Agricultural College, Amherst, Mass.

For *Vice-President*—Charles A. Lory, president of Agricultural College, Fort Collins, Colo.

For *Secretary*—E. E. Balcomb, department of agriculture and geography, State Normal School, Providence, R. I.

On motion, the report of the committee was adopted, and the nominees were declared elected as officers for the ensuing year.

The meeting then adjourned.

E. E. BALCOMB, *Secretary*.

PAPERS AND DISCUSSIONS

AGRICULTURAL EDUCATION FOR THE RURAL DISTRICTS

SEAMAN A. KNAPP, UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D. C.

[A Synopsis]

In a narrow way this topic may be limited to the kind of husbandry that should be taught the rural masses, and how to teach it successfully. In a broader way it may include the lines of education most helpful to the toilers upon the farms, and how to convey this instruction so successfully that it will transform and enrich rural life. We shall discuss the topic mainly along these broader lines. First, however, let us outline some of the more salient rural conditions as compared with cities:

First.—There is a much lower earning capacity of the rural toiler than of his equal in the city and a consequent dissatisfaction upon the part of the farm wage-earner.

Second.—There is a lower and more hazardous return from farm investments than from those in commercial or transportation lines and a consequent disinclination to hold country property.

Third.—In the past half-century rural improvements have not kept pace with civic, and social conditions upon our farms have declined by the removal of many old and cultured families to the city. The progress of our cities has been so phenomenal that they have attracted people of education and refine-

ment to the detriment of the country, and it has especially lured the brainy youths of the farm with visions of becoming captains of industry.

Fourth.—There has been a gradual increase of tenant farming, until it now represents about 40 per cent. of the total, and the marvelous advance of cities in population, wealth, and political power is part of the current history which indicates radical changes in our commonwealth not gratifying to lovers of a broad liberty.

Fifth.—From the standpoint of the statesman, our large cities are danger-places on the map of our republic. Homes are so costly that only the rich can own them. The poor, and even those of considerable earning power, are tenants at will. The industrial enterprises are vast and it requires enormous wealth to handle them. Each supports an army of employees, all dependent upon a managing will. In several of our largest cities there is a large number of men so completely dependent for a day's toil that they are compelled to cast their votes for a job, and there are as many more who are unavoidably influenced by their jobs. There is also, where great numbers are aggregated, a mass leadership regardless of wealth. Generally this represents organized and predatory poverty. It matters not that the prosperity in cities, so far as it relates to the masses, is illusory; it attracts, it allures.

Many and radical reforms must be worked out before ideal conditions can be established generally in the country.

1. A much larger percentage of the farmers and their families must be broadly educated and of high character.
2. The farm lands must be so improved and managed as to yield a more certain and profitable return for labor expended, and afford greater profit for the toiler than employment in the city.
3. The farm improvements must be durable, suited to the requirements of the farm, convenient, and attractive.
4. Churches, schools, means of communication, social conditions, and opportunities for accumulating wealth and for civic preferment for the masses in the country must be as good as, or better than, those in the city.

The methods to accomplish this rural reform, briefly outlined, are as follows: The first step to be inaugurated among the people is the Farmers' Co-operative Demonstration Work of the United States Department of Agriculture, by which the elementary lessons in agriculture are taught directly to the farmers and their methods improved, so that they are able to realize two-, three-, and fourfold the results now obtained by them. Thru this increase of income the people of the rural districts are able to improve their homes and to pay expenses incident to a higher civilization. Every upward step, whether in city or country, costs something. No great advances can be made unless this added cost be provided for. Thru this instrumentality the homes of our rural population will be greatly improved.

The second great step in the rural uplift is the consolidation of the rural schools. The neighborhood school is simply adapted to a people in a very

elementary condition of society. They are simply kindergarten schools, but when too many branches demanded by modern conditions are thrust upon them they are totally unsuited to meet the requirements of the people. It is better for parents to send their children a greater distance and have a real country school, properly equipped and graded so as to meet all the requirements of rural education. In such schools agriculture should be an important line of education. However, even in such schools it is out of the question to teach all that relates to agriculture, and a mistake to attempt it. The present curriculum which has been worked out with such care should not be so disturbed as to inject into it courses of study that must gradually weaken the instruction now given. The public demand for agriculture has made this error—a lack of definiteness. It would have been much better had legislatures simply demanded the teaching of two or three things which are universally required and which would have given some greatly needed information to the people. Instead of agriculture, should be substituted the vegetable and fruit garden, the cow and her products, and poultry. These three lines of instruction would give definiteness to what is required. As it is now the teachers are perfectly at sea, and there will be an attempt to teach almost everything, from pure science related remotely to agriculture to the purely mechanical methods of the farm. In the family vegetable and fruit garden would be included all the instruction in soil, in seed-selection, how plants feed and how they grow, and in methods of cultivation necessary for the rural town and for the country in an elementary way. Practical lessons about the cow and her products, and poultry, would give the kind of knowledge required in every household in regard to such common food supplies as milk, eggs, veal, beef, and the flesh of fowls; how to produce them economically; their value, and the offices they perform in the human system when used for food. Instruction of this character is along the line of people's daily necessities and gives the kind of knowledge required by the toiling masses. There is little danger of teaching incorrect theories or methods upon these subjects because the object-lessons are at hand for correction. In most schools it would be better to give instruction in only one of these at a time, commencing first with the market garden; second, poultry; and third, the cow and her products. No one should be considered educated who is ignorant of the economic production of these, and their great value in the food supplies that must form one of the chief sources of sustenance for the human race.

Instruction in these branches could be given as well by women teachers as by men. In nearly every school district one or more model gardens could be established among the patrons of the school and in most districts someone could be induced to purchase a better cow and improved poultry, and keep their records for the school. Ask the pupils to bring samples of their gardens, of their cows and poultry one day during each school term. Call it Agricultural Day, and invite the parents.

One of the greatest forces in education is to get the people to compare

their products and realize that there is a method that will produce better results.

Upon this plan every school teacher will become an educator not only of the children but of the adult population of the district.

The Farmers' Co-operative Demonstration Work of the United States Department of Agriculture and the State Colleges of Agriculture could furnish instructions and thus assist. In the teaching of agriculture it is not so much books that are required as an awakened inquiry upon the part of pupils and patrons. Object-lessons and competitive exhibits, with proper direction by the teacher, will do more than books.

Public opinion is that power in civilization which regulates and controls matters beyond the realm of law, and it is just as important that this should be framed upon a conservative and wise basis looking to the greatest good to the greatest number as that laws shall be enacted of the same character.

At present there is little real country public opinion. It is mainly a modified town opinion, collected on streets and in stores and taken home by each farmer as he returns from a weekly visit to his market town.

To have a true rural public opinion there must be real rural society. Sound public opinion cannot be imported; it must be made on the spot and for the purpose.

The home, the school, and the church are the three great forces upon which we must depend for the establishment of society, the creation of a true public opinion in the country, and the final readjustment of rural life. The three forces are ever present and all-powerful, if united, and can make a true rural public opinion with potential forces to control conditions in the country.

Another course emphasized is the organization of boys' and girls' clubs with the object of working out at their homes, in the garden, and on the farm the lessons inculcated at the schools.

Great emphasis should be placed on the means of teaching the dignity of labor, the value of thrift, the giving to the young a larger measure of common sense by causing them to be more familiar with the common things of their environment. Special value should be placed on the importance in a republic of the ownership of small farms. There are two ways to look at a small farm. One is the common way, that it is a place to make a living and rather a hard place, and should be sold as soon as anything better can be found. The other is that the ownership of land is a mark of honor; that a patent to land is a title to nobility and right of sovereignty. The ownership must be complete, subject only to the state, so that each proprietor is the independent sovereign of a portion of the United States, that the final power thru the ballot to control the local, county, state, and national governments is a position of great dignity and power.

I have tried to make clear the importance of an education in common things for common people as opposed to the exceptional and the remote. If we have no more time than is necessary to become perfect in the knowledge

of one country, let that country be our own. Study the history, the language, the soil, the climate, the animals, the birds, the plants, and all the conditions that make for home success and comfort. If still there be inclination, leisure, and means, then extend the researches into foreign lands. We are on the wrong line. We have tried to master ancient history without knowing modern. We have tried to translate the classics and have failed for lack of English. A great nation is not the outgrowth of a few men of genius. We agree, however, that to meet our highest ideals the classes, occupations, and provisions of our commonwealth must be strengthened and developed in the life-work of the individual to the extent of his capacity.

I have tried to show that there are forces in the field for the readjustment of the rural conditions, if vitalized and brought into service. There is always a class eager to establish new agencies, to join battle without industrial equipment, to attack a stronghold with raw militia, and to storm impregnable fortresses with guns that would not breach a camp tent. It has taken centuries to establish the schools we now have. With a little readjustment they will do the work required for agriculture. Even in this we are learning to include instruction in agriculture. There is danger that we may eliminate branches of great value which are necessary to the rounding-out of the rural toiler in his obligations to human society. If our institutions are to be preserved, it must be accomplished by making greatness common. More thoroughness, faithfulness, exalted character, greater breadth, perfect intelligence, and larger views of human rights and government requirements, millions of inspired doers who give to every creation of their handiwork such perfection of accomplishment that what man has wrought blends perfectly with what God has created. Millions of scholars in their rural homes controlling knowledge and promoting art. Millions of statesmen toiling on the farm and in the factories, working out the details of a broader life, and millions of rural philanthropists making improvements to better the old.

What can teachers do to help our rural conditions? Everything. They are an essential part of the greatest of all universities—the home. They have charge of the extension courses. They can inspire in the youth a love of knowledge and make all its avenues look delightful. They can unlock the books which are treasury-houses of human wisdom and give them a golden key. They can cause the soil to become more responsive to the touch of industry and the harvest more abundant; they can add to the comforts of the home, mold its environments into lines of beauty, and increase its attractiveness until the home shall become the greatest magnet of our people. They can create a love for investigation and give it direction, and can enlarge the knowledge of the people in common things and thus lay the foundation of common sense. At their instance fingers will touch the lines of deftness, mechanical skill will become universal, and thrift and alertness will transform the toilers into captains of industry. Their mission is to make a great common people and thus readjust the map of the world. The dawn of a greater life will appear. A

nation of broader horizon and higher purpose will stand forth to battle for human rights.

SOME MEANS OF AWAKENING AND MAINTAINING AN INTEREST IN AGRICULTURAL EDUCATION

E. E. BALCOMB, STATE AGRICULTURAL AND MECHANICAL COLLEGE,
STILLWATER, OKLA.

One of the inquiries that has come to me many times and from many sections of the United States during the last few years is, "How can we interest the parents and the pupils so that we can successfully introduce agriculture into our schools?" Another question, which is a necessary second to the first, is frequently asked: "How can we maintain the interest?"

It is generally conceded by leading educators and thinking men and women that the present school system is inadequate. Leaders in educational progress feel that, thru the study of agriculture and other subjects closely connected with the environment of man and his struggles to feed, clothe, and shelter himself, we shall come more nearly to educating our young people to become contented, cultured citizens, capable of meeting the demands made upon them in life. But believing these things ourselves does not make it possible for us at once to introduce these subjects into the schools.

For years we have educated pupils and parents to feel that education, the real article, meant so much knowledge of abstractions, of algebraic terms, and the ability to decipher Greek and Latin—a mass of knowledge which has no application to the life they are to lead.

And they came to believe that the possession of such knowledge was *the* means and the *only* means of bettering the conditions of their children.

Now we must go thru the process of educating the mass of the people to our new conception of education.

Where no sentiment has been aroused for these things it is best to begin with talks at all kinds of gatherings, to have articles in the local and state papers. It must "get into the air," "into their systems," until there is a subconscious feeling in the community that somehow it is "*the thing*."

These lectures should prove: That the study of agriculture is education; that it is practical to teach it in the school; and that the teaching of it is profitable. To relate marked incidences of what has been accomplished in other states, bringing it as nearly home as possible, gives the best results.

I have found that such statements as these appeal to the average citizen: "In Iowa, by teaching the farmers the simple process of testing seed corn for vitality, the value of the corn crop each year has been increased several millions of dollars. In Minnesota the oat crop has been increased in some localities 25 per cent. by the improved seed developed by farmers and school children. For years the rest of the country has poured millions into the coffers of Wisconsin for her butter and cheese and high-grade milk cows, because of her separa-

tor, her Babcock milk tester, and other scientific knowledge of the processes connected with milk and its products."

Hon. Dick J. Crosby's article on "Boys' Clubs" in the 1904 *Yearbook* is most effective. He describes the two large pyramids of corn at the St. Louis Exposition, made up of 1,000 little pyramids, each containing ten beautiful ears of white or yellow corn with these legends above them: "Grown by the Farmer Boys of Illinois." Then he gives the story of how this was brought about. It sounds like a fairy story and is simply fascinating. To read of the boys coming to the first contest in a little town of Illinois with their first corn for exhibit, some walking and lugging their corn, some of it in boxes, some in coffee sacks, tied up with binder twine, shoestrings, bed cord, anything, thrills and moves one as much as do the old stories of the boy going off to school, arriving in the village with only seven cents in his pockets and all his earthly belongings in a red bandana handkerchief, and later burning midnight oil to master Greek and Latin lessons.

Just get some of the old-type orators, the type that used to look into those bright eyes and see a coming president of the United States, Patrick Henry, or Henry Clay, and let him tell of these corn-raising victories of boys—and then watch results.

I am no orator, but even I have talked to a crowded house of patrons, or gone into a district school in Oklahoma and told the little fellows of the \$10,000 offered at Omaha for the best ten ears of corn, and told them what the boys in Nebraska, Illinois, and Wisconsin have done, and their eyes would grow large, and they would begin to talk of the old hog lot that their father would surely let them have to raise their prize corn; and backward boys have been anxious to go to the blackboard and figure for me how much more they could raise with good seed corn than could be raised with ordinary seed. And the old father saw it, and he saw, too, that such things made the boy eager to figure, that it made his arithmetic real—"Figures talk." And when you show that the boy is still getting readin', 'ritin', and 'rithmetic, the old father is glad to have his boy study agriculture.

Tell them that one grain added to each ear would increase the corn crop of the United States 5,000,000 bushels.

A recent report from Mississippi shows that three hundred boys in the contest in one county averaged 70 bushels to the acre, one raising as high as 124 bushels. These are the figures that talk. These are the things that awaken interest.

Accompanying the lecturing must be convincing demonstrations before the audience: Tests of milk with the Babcock milk tester; actual lessons in stock-judging with the horse or the cow present; real lessons in cooking.

In Oklahoma, to create the proper sentiment for agricultural education, we have had joint teachers' and farmers' institutes. Patrons, pupils, teachers, and schoolboards were urged to be present. Often the entire schools of the county were dismissed and teachers brought their pupils. The best results

for interesting all were obtained where we had actual instruction for boys and girls. For two days we had a school. There were classes in corn-judging, stock-judging, milk-testing, scroll-saw work, weaving, etc. I carried outfits and materials with me. We used local teachers for helpers. There were a number of classes going on at the same time. Boys and girls were actually taught to do things. The children were enthusiastic. The parents caught the spirit. One young man, who brought eighteen pupils to the institute from his school, wrote me afterward that the boys talked of the meeting continually, and were making plans to "show me" next year.

I remember one place where I held an institute, a little girl asked to keep a loom to finish her little rug, promising to bring it back before I left. She failed to come to the hotel. But when I was boarding the train she came, all out of breath and handed me the loom as the train pulled out, calling to me, "I just got it done!" The results of giving the children this actual opportunity to work with the tools meant the introduction of manual training into the schools of that little city four weeks later. It meant, too, a number of boys and girls for our contests. The principal wrote me, "You have awakened the whole town." The fact is I simply gave the boys and girls something to do, and *they* awakened the whole town.

A part of my plan was to carry a large exhibit from various schools in the state—work actually done by children. A little apron with dear little stitches, made by a little third-grade girl would win the hearts of many for domestic science.

We found one of the most effective means of awakening an interest in domestic science was to give lessons in cooking and table-service to a group of girls before the audience. We took girls having had no previous instruction and gave lessons in hall, church, opera house—anywhere, and borrowed our equipment, adapting ourselves to circumstances, and showing that with very little equipment palatable and attractive dishes could be made.

In one instance where we needed some girls at once to take a lesson, we approached a group of six school girls who had just arrived from thirteen miles in the country. With a short explanation they accepted the invitation and went immediately to the hall and began taking instructions for making tomato soup. We had expected to make a sample only but, finding the rations were short, the girls, under the direction of the teacher, made a good bowl of soup for each of seventy-five people.

That was strenuous work but netted good results. The women of that county formed an organization and began studying household topics. They assisted the county superintendent, financially, so that he could secure the teacher, Miss Hazel Clark, of Tonkawa, for his summer teachers' institute. What would the results have been if the teacher had talked to the audience an hour on the properties of wheat, amount of gluten and protein, etc.?

We must go to the farmer. It is most profitable to go with the county

superintendent thru the county, giving lessons at schools and holding evening sessions, giving demonstrations and doing actual work as suggested above.

I thoroly believe in boys' and girls' clubs and consider them one of the best means, under our present school system, to 'arouse and maintain an interest in agriculture and domestic science. We have some good beginnings of club-work in Oklahoma under the direction of devoted county superintendents. Superintendent Moors, of Cheyenne, has a scheme for prizes. He began by himself, donating a thorobred pig, and then secured donations from others until now he has six pigs in his pen. The boy winning first prize has first choice. To get the best pig the boys will have to learn to judge hogs. It makes a double contest. In the bread-making contest, the girls are actually to bake the bread at the meeting.

To maintain an interest in these subjects we must have efficient teachers, and until teachers are prepared it is folly to demand the formal and extensive introduction of these subjects into our schools. Demand preparation of teachers first, then instruction in the schools.

Until teachers are prepared let us undertake only a few things. Let us make a few things practical, and study them in such a way as to awaken an interest for further investigation, for home study and home experimentation, for research work, using geographies, government bulletins, magazines and farm journals, stories of peoples and their achievements.

In place of the regular graduation essay or oration, it is suggested that the pupil have some particular problem to work out. It may be some problem in connection with agriculture or horticulture is assigned. Let this problem be comparing the milk products of two cows in the father's herd during the year, the cost of keeping hogs from birth to marketing, showing the time of greatest growth. The boy might arrange to cultivate a small tract of land, keeping an accurate account of the expense and labor applied, and the amount of revenue received from it, the problem being to see what the maximum rate of revenue from a given investment could be made, allowing the boy to keep poultry, live-stock, raise garden truck, etc. The girls might keep accounts showing the cost of living for a year, the income from poultry and butter, list of clothing, cost of furnishing a home, with house plans and most suitable furniture for each room, making a chart of this; menus for different seasons of the year with cost of same, etc. The children should be left more or less free to select their own problems. This study should continue thru the year and would largely be carried on at home, in the country, and partially in shops at the city. The results should mean so many points, a part of the examination for graduation.

The idea would be in every case to connect the intellectual school life with life-problems and actual physical labor, so that the young people would realize that book learning was only one part of their real education. This would at once relieve the textbook work from being the dry grind that it has been so long, and relieve the physical labor from being the drudgery which it invariably

becomes if there is no form of intellectuality connected with it. All other subjects all thru the year should contribute something to the problem. It would be a great advantage if this problem could be of such a nature as to maintain the interest of the young people after they have passed the formal graduation period, so that they would still come to the teacher once a week, or in the evenings for assistance in carrying on the work. In this way the child would pass from school into life naturally and easily.

Live educators can do much under the present system, but if we are to maintain the interest and teach these subjects as they should be taught, and really train the masses for citizenship, we must change our whole system of education.

The great mass of evidence obtained by the Country Life Commission goes to show that the schools are failing to do the task they were once supposed to do. We have a large educational machine that fails to do real educational work.

Professor Began, of the Lane Technical School in Chicago, says: "I often wonder what it is in our make-up as teachers that impels us to gaze at our work through the telescope of tradition and precedent, which magnifies the importance of Greek and Latin and ancient literature, while we ignore the pitiful sight of mankind on its knees praying in all its terrible literalness, 'Give us this day our daily bread.'"

Equal opportunity should be offered to all, whether in the field of the intellectual or the mechanical. Education should fit the young people for their life-work. The nation has too long asked of the public-school system bread and been given a stone.

The new theory of our public school is that it is a mental gymnasium plus useful activity; that the implements used to develop the mind are useful in the activities of after-school life like the saw, the hammer, and the chisel of the carpenter's apprentice; that they are not thrown away like the dumb-bell, but become the tools with which real work is done in after life. We have the example of a few schools that are partially solving this problem.

The Lincoln School at Santa Barbara, Cal., furnishes indisputable proof that an ordinary school, under the most unfavorable conditions, can equip its pupils for social efficiency, for useful lives. The condition of the school was very bad indeed. The economic side strongly appealed to me. The gardens were made to pay, and furnished the resources to purchase shop equipment, and the shops in turn brought forth economic results. The boys mended over one hundred chairs and desks, built cupboards and bookshelves, and rebound two hundred books.

From the first grade to the eighth the children helped each other; they worked together at handwork and they studied and recited together. One group of children will be found gathering around a rug frame, transforming with busy fingers a piece of old burlap and some discarded clothing into a serviceable rug; another making a cupboard or building a bookcase out of mill ends and dry-goods boxes; and still another constructing a punt for surf-boating. While their hands are busy they are talking over their lessons,

most of which are based upon the things they are doing. At work with cotton goods they have a genuine, living interest in cotton, and they get its geography and history and nature-study, because they have a real reason for wanting to know it. Arithmetic and language grow out of the work in the same way.

There is a course in mending anything that belongs in or about the home. A broken thing is placed before two or more children and they are asked to work out a good plan for mending it. A plan is adopted and carried thru to success, whether on the first trial or on the third, or on the thirty-third. The educational value of a problem like this is equal to any that can be found in books. The ingenuity which some of them display in this mending is quite remarkable, and the training that they get makes not only for power but for culture as well, and for utility.

There is a course in simple housekeeping, for nearly half of the girls in that school were the only housekeepers their homes had. Rooms were fitted up and the girls given actual training in housekeeping; how to "tidy up" a room and make a bed; how to decorate in a plain and tasteful way; how to cook and to buy the simplest and cheapest food. They have shoe-judging and cloth-judging contests, as well as fruit-judging and vegetable-judging.

Formerly more than 70 per cent. dropped out before getting thru the seventh grade; now less than 15 per cent. drop out at that time. In the conventional studies the grades are as high as any in the county.

From all parts of the city are coming requests that something like this plan may be followed in the other schools of Santa Barbara.

In France the apprenticeship idea has been worked out on the farm. In North Carolina, they are trying something of this kind. But I would have my farmer boys do their apprentice work on their father's farm. I would make the system more of a continuation school than an apprentice school.

I want study and improvement to go on and on, with granting of diplomas as mile-stones—marking progress, but never the end. As long as there is life there is improvement and growth.

DISCUSSION

W. S. SUTTON, professor of education, University of Texas, Austin, Tex.—The papers we have heard this morning are interesting and valuable. They furnish the strongest kind of evidence that agriculture can be reduced to pedagogic form, and can be used effectively for both practical and disciplinary purposes in our schools. Careful students of education thruout the country, including college presidents and college professors, are recognizing the worth of agriculture as a subject of study. In many colleges agriculture may be elected as an entrance requirement.

While we may rejoice at the progress of agriculture and the teaching of agriculture in our country, yet prudence demands that, in the curriculum of our schools for rural children, agriculture itself should not be overemphasized. The great purpose of education is spiritual development, and such subjects as language and history should, by no means, be neglected. It is far more important that the teachers of this country be engaged in the making of men than in the making of farmers or mechanics or lawyers or doctors or what-not. Any policy which may lead to the peasantizing of farmers should not be

olated in this democratic country, and I am glad to know that many thoughtful leaders in education subscribe heartily to this view.

If this view be correct, there should be no friction whatever between teachers engaged in giving instruction in different subjects or between schools of different rank. The university that does not render substantial service to other phases of education has no excuse for being, and, on the other hand, other schools that do not minister to the welfare of the entire school system are not worthy of the support of an intelligent people.

NATIONAL AID IN THE PREPARATION OF TEACHERS OF AGRICULTURE FOR THE PUBLIC SCHOOLS

HOMER H. SEERLEY, PRESIDENT OF STATE TEACHERS COLLEGE, CEDAR FALLS,
IOWA

The present need.—Among all the greater problems of modern public education, that of the industrial training of the common people so as to enable them to give a more productive service to their day and generation has been the most difficult of solution because of the magnitude of the enterprise undertaken and of the personal, practical nature of the accomplishment sought. All other education can be conducted in groups and in schools, but this is obliged to be personal and individual. All other efforts heretofore outlined admit a similarity in individual needs and provide a course of study that seems to suit the mass of those who study and recite, but this effort depends upon the recognition of remarkable diversity in individual needs, and demands a provision that will permit the preparation of each individual for large efficiency in some one particular direction. This psychological fact has delayed the progress of industrial education, and has magnified the expense of such training by compelling a recognition of the fact that education is for the man rather than for society, as thru the man's competency, after all, is society to be actually benefited.

Improvement in mechanical lines.—The progress of the common mechanic arts has been more than ordinarily successful, because such individual instruction is particularly adapted to the needs of the populous community where wealth and enterprise easily combine to develop a competent and well-equipped workman out of the ordinary public-school pupil. For similar reasons more differentiation of teaching skill and of pupil capability can be recognized without such extravagant expenditure per capita or without alarming the student of social conditions as to failure to secure mass improvement among the multitude. The few representatives of modern industrial educational effort who receive this training are so satisfactorily prepared for occupation that the critic of educational progress is satisfied with commending the results obtained as the thing to be done, not only for the few, but also for all, hoping that the good example thus set will act as a contagion that will reach the multitude.

Difficulties in agricultural education.—Now agricultural education applied to the rural communities is a much more gigantic problem than that of mechanic-art education applied to the cities and towns. Agriculture is not one occupation but many complicated occupations, depending not upon a single science but many profound sciences, reaching success not in a single kind of

skill and capability but many kinds of skills and of capabilities. In this vocation, empyrical education has prevailed from the dawn of civilization. While this has been sufficient to protect and continue to a certain extent the race of men to the present, yet it is admitted by students of the history and development of civilization, as found in the nations of the past and present, that scientific education and training of the people of the rural communities are absolutely necessary if the development and progress of the American people on this soil are to be permanent and definitely prosperous. The gigantic nature and the great importance of this problem ought to appeal to everyone who desires an early solution of the question at issue.

The nation's interest.—It is conceded that the nation as a whole ought to be interested in the education and training of the mechanics, the engineers, the housekeepers, the cooks, the electricians, the miners, and special employees of the great manufacturing and transporting industries, because their competency and their skill determine the standing of America among the nations of the world; but it should never be forgotten that all these will fade from prominence and distinction when agriculture and its allied industries are unable to furnish the products of the soil for the maintenance and the support of all those who contribute to the other kinds of national prosperity and success. These things make it extremely imperative that a greater enthusiasm be shown regarding the supreme importance of the effective educating and training of the pupils who are to become the future agriculturists. It is evident that the resources of the country at large depend upon agriculture being made an exact science, and that those who are to follow this vocation should realize that there is no more urgent demand for special training than there is for this kind of instruction among the masses of the American people. This is not so much a question of making more money per individual per acre and thus securing greater temporary prosperity, as it is a question of perpetuity of national life and of permanent prosperity.

The state's interest centered.—It is thus evident that the different states in the Union can well afford to get positively interested in the developing and improving of the country schools, so that the country boys and girls are actually trained for efficiency and happy, successful life. It is also evident that this undertaking is a remarkably large, expensive, and difficult problem, that involves more vital questions than are found in all other fields of public education, and that it means great losses to the nation as a whole if these fundamental interests are not conserved and if the welfare of the rural child is not properly regarded.

Nothing of any real value in this direction is going to be accomplished so long as the enterprise is conducted on as small an expenditure as at present, or is given so petty a place in national and state legislation as today. The investments that ought to be made by both state and nation in training skilled teachers for this great rural industrial field should far exceed what is now done to educate a few experts in the great colleges of agriculture for giving advice and conducting experiments to learn the best ways to do the work of farming; since the

fate of present-day civilization is determined by the education of the masses, and not by the education of the classes. In addition, both the state and the nation should combine to give such financial returns for rural-school teaching that well-educated, well-trained teachers may receive sufficient remuneration for services performed so that a creditable livelihood may be earned and an honest, effective service may be a reality.

Great training of men means a greater nation.—The nation has no larger field for permanent returns than is this of improving the industrial capacity of the rural populations. The states alone have thus far not shown themselves fully able to assume financially this great service and at the same time carry on successfully the other things demanding attention and support. The initiative of the scattered populations in the country is not of a character that can combine and develop these resources of power and prosperity. The present knowledge of these populations is not universally sufficient to give the impetus to the service even now needed, and many generations must pass at the present rate of progress before such essential standards can be reached; hence it does seem extremely essential that this great undertaking should receive a strong and effective start in this generation.

Comparisons unfavorable to custom.—What is national prestige in battle-ships, armies, and navies as compared to the prestige of the industrial prosperity of the masses? What are Panama canals and great trunk lines of railways and magnificent steamships unless we can maintain our supremacy in agricultural products and give commerce its necessary conditions? What are war balloons and conservation of national resources and higher education for the professions if there are no industrial masses to support the whole on their shoulders? What are monuments and factories and great public buildings and national prominence if the teachers of the rural populations are not qualified or conversant with their duties, or capable of meeting the emergencies that are rapidly developing?

Help and co-operation must be given.—For these reasons this question of the agricultural education of teachers has been emphasized by some thoughtful Americans for the past decade. For these reasons, the National Congress has been asked to encourage the states that they may put forth more strenuous endeavors to reach the greatest demand of the present age. It is needless to say that an impression favorable to the cause has been made wherever these facts have been presented. No intelligent person has rejected the claim as improper or as unnecessary. The chief difficulty has been to get the responsibility for this untoward condition located. The states have pleaded incapability to undertake it; the nation has pleaded that all such work belongs to the states and was not for it to assume; and yet Congress has every year appropriated vast sums for other undertakings that are of less national importance than the education of teachers for agricultural service in the country schools. In consideration of these things it does seem that the campaign ought to be continued; that the cause of the common people ought to be kept to the front by all who recognize

the importance of industrial education for the common man, and that in some way before long the leaders of the people shall be made to recognize the greatness of the undertaking; or, if that cannot be done, that the industrial classes themselves will arise in their majesty and demand their inalienable rights from the hands of those who represent them in the halls of legislation.

The method proposed.—The accomplishing of this educating and training of the rural-school teacher to add to the public schools the industrial activities does not necessarily mean the preparing and adapting of every woman teacher to do this kind of work. For this to be determined as the real size of the problem at the outset would be the probable abandonment of the entire scheme as purely chimerical. It is feasible, however, to solve the situation in an entirely different way. Men teachers are the ones who must be induced to become thus identified with the work of teaching and training the future agriculturists, and this can be successfully done by so reorganizing the system as to place a man, as instructor in agriculture and assistant superintendent, in charge of a territory in which from fifteen to thirty rural schools and school teachers would be located. Under the inspiration and direction, as well as the instruction, of this rural-school superintendent the work in agriculture could be successfully carried on, and thru his sympathy and helpfulness both teachers and pupils would successfully develop the work to be done. This plan may be carried out with moderate original and subsequent expenditure beyond that now annually invested in rural-school management. If to this could be added the county-unit system, whereby the management thru a county school board and a county school superintendent could be unified and the fiscal transactions be thus more liberally provided for, the rural schools would experience a revival in efficiency that would surpass any present or past accomplishments.

To inaugurate and carry on this preparation of agricultural teachers for the rural schools, the state normal schools are the specially organized public institutions to conduct this training. They are successful schools for teachers and are prepared to teach everything that is now wanted except agriculture and mechanic arts. If these studies were added to their province and this training were supported by both national and state appropriations, the work so urgently demanded could easily be provided by every state.

DISCUSSION

JOHN R. KIRK, president of the State Normal School, Kirksville, Mo.—There is dense ignorance in higher education circles as to what agricultural education is and what it is for. It is usually discredited by the university committees that dictate courses of instruction for secondary schools. Most of the committees on college entrance are yet so ill-informed that they contentedly discriminate against practical laboratory work and scientific instruction in agriculture. They see in school education little or nothing outside the old-time, so-called culture studies, such as algebra, Latin, physics, etc.

It happens to be my lot to meet face to face each year more than one thousand students and to help them plan their programs with a view to academic courses in the upper half of the high-school curriculum and the lower and middle parts of a college curriculum.

Many of those students are high-school graduates. Others have had from one to three years in colleges and universities. Many of them are planning to enter universities. I am, therefore, compelled to know the sentiment which prevails in the community at large and also the attitude of the gentlemen who control university-entrance requirements and programs in the university. Physics is one of the studies for which the tradition-bound university committees give credit. A student having nine months of rather poor instruction in physics will receive, from the committee, full credit for a unit in physics, with a view to entering an A.B. course in the university, while a better student, having a highly efficient course of nine months' instruction in a first-class agricultural laboratory and using an abundance of scientific literature, will receive no credit from the committee unless he proposes to enter an agricultural course or some other course in the university which is not taken at par value by the committee.

We have a great campaign of enlightenment before us. On the one hand, the stolid indifference of many communities is an obstacle. On the other hand, the tradition-bound committees in higher institutions constitute a greater obstacle.

The old definitions of studies for culture and studies for utility have done harm enough. They should be abandoned. I recall the following incidents:

One morning a teacher from the Latin Department placed on the chapel platform a large and beautiful bouquet from his private garden. Its presence suggested an explanation to the students, which was to the effect that Latin is a culture study for those who do not turn it to an immediate, practical use: it is a study for utility to those who are soon to make their living as Latin teachers. The bouquet allied itself with both the utility and the culture phases of the Latin teacher's life. Another day the agriculture teacher placed on the platform a larger and more beautiful bouquet. Fifty students in the chapel knew how the bulbs back of that bouquet had been potted and wintered and brought thru the spring and early summer. This bouquet suggested that agriculture is of tremendous consequence as a culture study. Then a great school of six hundred prospective teachers applauded both the Latin professor and the agriculture professor, and no one could tell which of the two departments was more for culture and which was more for utility.

I think it is time for schoolmen to free themselves from tradition. I have lately visited farmhouses where the people were as familiar with their libraries and as skillful on their musical instruments as any of the city folks; and some of my neighbors in the city are as practical in shopwork and farming and gardening as those who live on the farm. Some of my own graduates in agriculture courses are as refined, as literary, as cultured, and as modest as the best of those produced by the department of classics.

Education in agriculture is for utility and for culture. If any studies deserve aid from any source, agriculture is one of them.

HOW MAY THE RURAL SCHOOLS BE MORE CLOSELY RELATED TO THE LIFE AND NEEDS OF THE PEOPLE?

DICK J. CROSBY, UNITED STATES DEPARTMENT OF AGRICULTURE,
WASHINGTON, D. C.

In the summer of 1908, as the members of this Association are aware, President Roosevelt appointed a Country Life Commission, composed of seven men who are eminent because of their study of and knowledge concerning social, agricultural, and economic conditions in this country, to investigate and report upon the opportunities for better business and better living upon the farm. This commission, after holding thirty public hearings and considering in a

preliminary way one hundred and twenty thousand answers to printed questions sent out by the United States Department of Agriculture, found that the general level of country life is high compared with any preceding time or with any other land. It also found discontent in the country and in places discouragement; that farming does not yield either the profit or the satisfaction it ought to yield; that farmers as a class do not magnify their calling, nor do they understand it. Among the six leading specific causes of unsatisfactory rural conditions mentioned by the commission, the second was "lack of good training for country life in the schools."

The underlying problem of country life, as pointed out by the commission, is to develop and maintain on our farms a civilization in full harmony with the best American ideals, and one of the means of accomplishing this is thru education in the public schools. Concerning country-life education, the commission reported as follows:

There must be not only a fuller scheme of public education, but a new kind of education adapted to the real needs of the farming people. The country schools are to be so redirected that they shall educate their pupils in terms of the daily life. Opportunities for training toward agricultural callings are to be multiplied and made broadly effective. Every person on the land, old or young, in school or out of school, educated or illiterate, must have a chance to receive the information necessary for a successful business, and for a healthful, comfortable, resourceful life, both in home and neighborhood. This means redoubled efforts for better country schools, and a vastly increased interest in the welfare of country boys and girls on the part of those who pay the school taxes. Education by means of agriculture is to be a part of our regular public-school work. Special agricultural schools are to be organized. There is to be a well-developed plan of extension teaching conducted by the agricultural colleges, by means of the printed page, face-to-face talks, and demonstration or object lessons, designed to reach every farmer and his family, at or near their homes, with knowledge and stimulus in every department of country life.

Such a scheme of public education calls for larger school units, to the end that the per-capita cost of education may not be unduly increased when we provide better material equipment, better trained and better paid teachers, and higher grades of instruction within daily reach of the homes of all rural children. It calls for instruction in the principles and practice of agriculture and home economics in the rural public schools, and for the establishment of a limited number of new, special schools of agriculture and home economics. It demands a new point of view in teaching the subjects now generally included in the public-school curriculum, to the end that non-essentials shall be eliminated and greater concreteness and effectiveness shall be acquired thru problems and illustrations drawn from the farm, the home, and the common things in the natural environment of the children. And, finally, it must have the united support of national, state, and county educational agencies, the bureaus and departments of education, the departments of agriculture, the state universities and colleges of agriculture, the state normal schools, and the various associations of farmers and teachers, to study the pedagogical and practical problems involved in the redirection of country-life education. That the

problems are vast and complex no one will deny; that they are worthy the best efforts of our most profound students of education is equally beyond question or doubt.

The purpose of this conference, I take it, is to arrive at some of the main factors in the problems. I have attempted merely a statement of the general proposition. Others who will take part in this conference will suggest methods of solution.

DISCUSSION

S. A. KNAPP, United States Department of Agriculture, Washington, D. C.—The rural situation in the South which makes it necessary to support two systems of public schools is peculiar and unfortunate. The school problem there is working some peculiar changes. Certain counties are becoming mainly black and others mainly white because when the number of white farmers in a locality becomes too limited to support a school, they are compelled to move to some other section or county, and the same is true with the blacks.

The United States government should give some money directly to each rural school which attains certain standards of excellence and includes practical agriculture and mechanic arts in its course, rather than to give a lump sum to the district agricultural schools as suggested in the Davis bill. One high school which gives special attention to agriculture has informed me that it costs about \$8,000 annually above the income to conduct the farm. This certainly is a very poor demonstration of the success of the theories that are taught in the school, or at least of the theories that should be taught. The co-operative demonstration work, under my charge, will have three hundred and fifty traveling agents in the field during the ensuing year and these agents will hold many meetings in all portions of the South. At such meetings they will demonstrate how to double the product per acre and at the same time reduce the cost of cultivation, and they will urge a higher standard of living and a general improvement of the domestic life by adding to the table a garden and increasing the supply of cows and of poultry.

WM. ROBERTSON, Superintendent of Crookston School of Agriculture, Crookston, Minn.—One of the best ways to get teachers interested in taking up agricultural work in their schools is for the county superintendent to start contests in growing or selecting seeds and vegetables and in sewing and cooking. Minnesota had over four thousand boys and girls in such contests the past year. It is easy for the superintendent to get prizes from local business men for these contests. Our experience with this matter has taught us that when the young people get interested in this work they will compel the teacher to get interested. This is real and practical agricultural education. It so interests the young people that many more of them stay in the schools to complete the eighth-grade work. Our small county of Douglas is so interested that they graduated one hundred and thirty pupils from the rural schools of the county the past year. Their graduating exercises were in charge of the county superintendent, and were held at one time and at one place, the county seat.

Anybody interested in the details of this work may write to Superintendent of Farmers Institutes, A. D. Wilson, St. Paul, Minn., and ask for *Farmers' Club Circular No. 1*.

WILLIAM RILEY CALLICOTTE, lecturer for Colorado State Bureau of Child and Animal Protection, Denver, Colo.—The problem which concerns the farmer is, not how to produce more, but how to market and exchange what he now produces at a fair and profitable price.

Under present conditions, when he has a big crop down go the prices; when he has a shortage up go the prices; supply and demand, our economists tell us, determine the

prices. I have no doubt the farmer could easily increase his product immensely could he be assured a reasonable price for his produce.

The consumer now pays three dollars for what the farmer gets but one dollar for. This is not just to the farmer nor to the consumer. These are the problems that now concern the farmer, not the question of producing more.

Over two millions of men and women are now organized in the Farmer's Union, and this is the great question now up for solution by this great order.

Our schools and colleges should be able to aid them in their work, and I hope a place will be given this subject at our next annual meeting.

DAVID FELMLEY, president of Illinois State Normal University, Normal, Ill.—I cannot agree with the statement that it is impossible to legislate interest into this work of agricultural education in the public schools. The chief obstacle now to the general introduction of the work in our rural schools is the fact that teachers know but little of the value of the work, they know less of its content and method, and, because of this want of knowledge, they have little interest in it. We all admire the altruistic sort of interest that pursues a subject without any thought of personal advantage to the student; and we are in the habit of assuming that if knowledge is to be used for personal gain it immediately becomes tainted with commercialism. The great body of medical and law students pursue their professional studies with thought of professional usefulness, yet this does not prevent many of them from becoming students of law or medicine in those broader fields where little personal gain can result. We need legislation requiring teachers to prepare to teach agriculture in the rural schools. Interest in the subject will grow with the knowledge of the subject. The present demand for such instruction that exists in many of our progressive farm communities is fruitless because qualified teachers can scarcely ever be found.

The second difficulty in the way is the fact that teachers in the common schools move so frequently that they do not get the real interest of the school at heart. Some recent investigations lead me to believe that in 75 per cent. of our rural schools, children in the fall face a new teacher. If, in April and May, when the school gardens are to be planted, corn clubs organized, and plans made for the home plantings and home gardening of the children during the summer months, the teacher is already packing her trunk to move out of the district, but little of this work will be done. Aster shows, tomato exhibits, corn contests, and harvest homes are just as vital to the highest success in agricultural instruction in the schools as is the agricultural fair and farmers' institute with grown-ups. The farmers do not realize that a good teacher is probably worth from 25 to 50 per cent. more money to them in her second year than in her first. When this truth is realized and the fitting salary paid, agricultural education in our rural schools may become a reality.

OTIS W. CALDWELL, the University of Chicago, Chicago, Ill.—In the University of Chicago, and I am informed that in the University of Wisconsin and probably in a number of other universities, there is a tendency toward a larger number of subjects that may be offered in satisfaction of entrance requirements. The president of the University of Chicago has said that the University should accept for entrance any four-year's high-school work, provided that work has been well done. The difficulty in having high-school agriculture, as well as some other recently introduced subjects, accepted by the universities is found in the question whether these subjects are sufficiently well organized and well taught. The colleges are coming to accept any good body of material that is well organized and well taught.

J. D. TOWAR, director of the Agricultural Experiment Station, Laramie, Wyo., suggested that farmers' institutes were very helpful; that the school-library movement and especially the school agricultural library and the bulletins from the United States Department of Agriculture and state experiment stations should be in the hands of every district-school teacher.

A. H. MACKEY, superintendent of education for the Province of Nova Scotia, Halifax, when called upon from the chair said: The educational system of Nova Scotia is similar to that prevailing in the United States, in having eight years or grades in the common school followed by four years in the high school preparatory to entering the universities or technical colleges.

In the common schools they have four classes of teachers, mainly differentiated by their scholarship and maturity, which correspond to honor passes in the respective first-, second-, third-, and fourth-year courses of the provincial high-school system. Class "D," employed only in pioneer and poor sections, receive an annual bonus from the government of \$60; Class "C" of \$90; Class "B" of \$120; and Class "A" of \$150. After thirty years' service, at the age of sixty years, or thirty-five years' service if younger, these teachers can retire and draw for the remainder of their lives this provincial grant, semi-annually.

In rural sections, teachers who act as librarians of school libraries having two specified minimum values of books and amounts of circulation can draw an additional \$5 or \$10 for this service, on making the prescribed annual report.

By taking additional courses in "Rural Science," the higher-class teachers can qualify, if they have school gardens of prescribed status in addition to this extra diploma, for grants of \$15, \$30, \$60, or \$90 more than other teachers of the same class in city or rural schools.

There are over one hundred teachers engaged now, during the summer season, in Nova Scotia, taking a six-weeks' course at a time which does not interfere with their regular employment as teachers during the year. It is possible in three summer terms of six weeks at lectures, in the laboratories, and in the field, supplemented by reading prescribed texts during the rest of the year, to pass the examination required for the "rural science" diploma.

To explain the term, I must say that we have three other similar special classes of teachers: (1) the "mechanic science" teacher, manual training in woodwork, etc.; (2) "domestic science," manual training in cooking, sewing, laundry, etc.; (3) kindergarten; and (4) "rural science," being nature study of one's rural environment, so as to make clear practically the scientific principles on which agriculture, horticulture, and forestry depend. This last is not agriculture. We tried unsuccessfully to teach "agriculture" for a dozen years in the common schools: but it was not agriculture. But with the aid of school gardens, for which the school trustees can also obtain an *extra* grant of \$10, \$15, \$20, or \$25 from the municipal fund, provided a greater amount of expense had been incurred for fertilizers, plowing, fencing, etc., not including pupils' work, the pupils are interested practically in scientific principles underlying the successful exploitation of these industries. Here I may say that our schools have three sources of revenue:

1. The provincial aid payable to teachers in proportion to scholarship and professional qualifications, to which I first referred.

2. The municipal fund, collected with the municipal taxes as one of the rates. The amount is determined by the population, thirty-five cents being levied for every head within the municipality; but on the assessable property. This is paid to school boards—\$25 per annum for each teacher employed, the balance (the greater portion) being paid in proportion to the days' attendance of pupils at school. These municipalities may be of the size of counties.

3. The sectional assessment, voted at each annual meeting of the ratepayers, and levied on the section property by the trustees. The school section is a self-governing corporation in educational matters, a city, or town, or rural territory normally four or five miles in diameter with the schoolhouse near the center. The comparative importance of each of these sources of revenue will be shown by their totals for last year. In round numbers they are: (1) provincial grants \$335,000; (2) municipal grants \$147,000; (3) sectional assessment \$667,000.

The teachers draw extra from the provincial treasury, and the school trustees from the municipal treasury, for this rural-science teaching with the school garden as the laboratory;

and this acts as a stimulus to the sectional taxpayer, who likes to see as much money as possible come to the section from outside.

Our rural-science training school which is now at work meets in Truro, where the Provincial Agricultural and Horticultural College is located near the Provincial Normal College; so that the laboratories and instruction in the two institutions may be utilized for the scientific training underlying our rural industries. This summer the training school is conducted under the auspices of the two institutions, with additional instructors from abroad when the services of eminent scientific instructors can be reasonably obtained. Not only teachers, but clergymen, are proposing to take these rural-science courses.

There are three grades of school gardens defined, so as to give all communities a chance to develop them. The greatest handicap to our system is the summer vacation in July and August. As a rule the teachers leave then; and often some of the pupils.

To meet this condition, pupils who visit their garden plots once or twice a week—and it makes a very nice picnic occasion—can have their attendance reported to the secretary of the school board, which can be added to the attendance during the next school year, and thus draw a corresponding increase from the municipal fund.

Then again, the pupil who has a small plot in the school garden is encouraged to have a larger plot at home, worked out on similar lines. And when this is done, the value of the instruction is greatly increased and its influence extended.

Phenological observations.—All schools are also furnished with blank schedules for the observation of seasonal phenomena such as the first flowering, leafing, and fruiting of plants, first agricultural operations, meteorological phenomena, and the migration of birds, etc. Over one hundred objects are on the list. The eyes of all the children attending the school, covering a radius of two miles, are watching for these sights and report, bringing when possible the specimen to the teacher. A first find is quite a prize to the lucky pupil. This watchful mood enlivens the way to and from school. The pupils come to know all the early interesting botanical and bird species. The schedules, when filled, are sent in by the teachers at the end of the year, and prove so valuable that they are bound up by the Education Department in annual volumes for future studies of climate; and are compiled so as to show the phenological character of coast, inland, and highland regions from the south to the north, and from the east to the west. In fact, these school observations were found to be far superior to the observations made previously by members of scientific societies, whose reports generally showed a tendency for seasonal phenomena to progress in weekly spurts. For a number of years these average dates (or phenochrons) have been published in the transactions of at least two Canadian scientific societies. The work takes up no time in school, aids other nature studies, and accumulates valuable scientific data for local and general purposes in the years to come; while the educational effect on the children is good in kind and strong in degree. It all adds to the happiness of rural life and the value of rural education.

SPECIAL AGRICULTURAL HIGH SCHOOLS

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If I may be permitted, I desire at this time to discuss briefly the advisability of establishing special agricultural high schools, a subject to which I merely referred in my opening remarks. This subject was treated quite fully by Dean Davenport yesterday in a paper before the Department of Secondary Education, but no opportunity for public discussion was given.

Several objections to the establishment of special agricultural schools were offered by Dean Davenport but I shall consider only those three which are

likely to prove most misleading: (1) That the courses in special agricultural high schools are narrower than those in public high schools; (2) that young boys and girls attending them are removed from parental influence and control; and (3) that the establishment of such schools would tend to peasantize the American farmer.

In the first place I fully agree with Dean Davenport that the great mass of country boys and girls should be educated in existing public schools and that attention should be given to improving these schools thru the introduction of courses in agriculture and home economics, but I do not believe that the courses of study in special agricultural schools need to be narrowed to the extent that they shall be less cultural or less truly educational than existing high-school courses. On the contrary, I am sure that better courses than are commonly offered in schools attended by pupils from rural districts can be devised for these schools, courses which retain all that is essential of the old and provide for broad training along agricultural lines. Dr. A. C. True, of the Office of Experiment Stations, acting as chairman of a committee on secondary courses in horticulture, has already planned a course for horticultural high schools which embodies all that is necessary of language, mathematics, science, and other high-school work for entrance to Cornell University, and at the same time provides for daily work in agriculture and horticulture thruout the four years. I am convinced that the establishment of a few good agricultural high schools in each state would hasten the general introduction of agriculture and home economics into public high schools, and rapidly advance our school system to the point where the aim would be preparation for active useful life-work rather than merely for college entrance.

The contention that special agricultural high schools remove children from parental control would merit serious consideration were it not for the fact that we all know that the majority of country boys and girls who now attend high school not only go away from home to cities and towns but are not even under faculty control outside of school hours. On the other hand, a large percentage of agricultural high schools in this country are boarding schools, and the pupils in many of them are under as close and careful supervision as they would be at home.

That special agricultural schools will "peasantize the American farmer" is a cry we have often heard in the discussion of this movement in education, but I doubt whether the farmer will be much alarmed by it. If we were attempting to establish a system of special schools to which the farmer must send his children, he might well be alarmed, but no such thing is contemplated. Where special schools of agriculture have been established the farm boy is still free to choose between it and the public high school, just as in many of our larger cities the boy may choose between a technical high school and the old-line school. The special agricultural high school simply offers the country boy who has decided that he will be a farmer a better opportunity to prepare for his profession than the public school can ever afford him—better equip-

ment in buildings, laboratories, land, animals, machinery, and implements, and a better faculty of trained specialists. Are we so credulous as to believe that offering the farmer a better opportunity to prepare for his life-work will peasantize him?

We are told that the agricultural schools of Germany are in part responsible for the peasant farmer in that country, but facts do not bear out this assertion. As a matter of fact, the peasant farmer of Germany antedates the first agricultural school by several hundred years. He is a peasant in spite of the uplifting influence of agricultural schools, not because of it. And I cannot help believing that they have had some influence in making the German farmer the producer of some of the largest yields per acre of any farmer in the world. A few years ago his yields were not unusual, but today, largely as a result of adopting methods advocated and taught by the special agricultural schools, he produces twice as much wheat per acre as the American farmer, 65 per cent. more oats, twice as much rye, 35 per cent. more barley, and more than twice as many potatoes. Not much of a "peasantizing" influence about that! If the comparatively narrow work offered by the German agricultural schools can accomplish such results with a peasant farmer, how much more might we expect from well-equipped, well-manned agricultural schools in America where every farmer is a prospective candidate for president.

THE PRESENT STATUS OF AGRICULTURAL EDUCATION IN THE PUBLIC SCHOOLS

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To give a correct idea of the present status of agricultural education in the public schools, a general survey of the growth of the movement is necessary. The limitations of this paper permit only a very brief review.

Public-school agriculture began with the school-garden movement in Germany more than eighty years ago. Forty years later, when Austria and Sweden gave financial encouragement to the establishment of school gardens, they sprang up all over Europe—more than 100,000 of them. And now we find gardens and instruction in agriculture in nearly every country of Europe, in the colonial dependencies of England—India, Canada, New Zealand, Australia—in growing Japan and in South American republics—in every country which is alive to the educational needs of her people.

The movement has grown from the school-garden idea to more definite and advanced agricultural instruction. The laws and requirements vary in different countries. Instruction is sometimes optional, sometimes required, with a tendency to require it in agricultural districts. Sometimes it is found only in secondary schools; sometimes it is required in every grade, running thru nature study, object-lessons, elementary science, and finally reaching the more advanced and technical agriculture. As in the United States, agricul-

ture is often made secondary to, or the outgrowth of, nature study and science; then, again, as in Denmark, the entire elementary-school system is woven around this subject where it is already recognized as of vital importance to the prosperity and happiness of the people.

That nations feel such instruction is essential to the development of the people and to the prosperity and welfare of the country is shown in the numerous provisions made for giving national aid and financial encouragement to schools giving practical agricultural instruction. To teachers who excel in the work, and to students taking special courses in practical agriculture, free tuition and board are sometimes given.

School gardens in Europe have been very much more extensive than what we have termed school gardens. Some years past, Russia reported 11,000 fruit trees, 22,000 forest trees, and 1,000 hives of bees connected with her school gardens.

In various ways the problem of making the work practical to those who most need it is being solved. Japan has 500 supplementary industrial schools, with 23,000 children, most of whom work on the land of their parents. The schools are in session evenings, Sundays, and holidays to accommodate those who cannot attend the regular school sessions.

In France and some other countries, there are apprenticeship farms; and, what seems to be more profitable, demonstration farms run by the government where practical and scientific instruction is given. We find short courses and itinerant instruction given to meet the needs of farmers and their families.

Agricultural instruction in the public schools of the United States is of very recent growth, altho its value was recognized as early as 1824. It was then urged that "agriculture and the gospel are the two great instruments of divine providence to check the voluptuousness and exercise the virtues of man." Our first school garden, planted in Boston in 1891, was for nine years only a flower garden. Since 1900, when kitchen vegetables were first planted in that garden, the advancement of agricultural education in public schools has been very rapid.

The greatest growth in our agricultural colleges has been within recent years. Nearly all of their extension work has developed within the last ten years. We have no statistics for farmers' institutes for 1897, but there was but little interest at that time. In 1908, 14,000 agricultural meetings were held for farmers. Now our agricultural colleges are giving short courses, reading-circle courses, correspondence courses; sending out millions of pamphlets, many of which are adapted to public-school use; conducting innumerable schools and demonstration farms, not only in connection with the college, but in other localities. This has had a great influence in creating a demand for agricultural instruction in the public schools.

School improvement leagues, observance of Arbor Day, boys' and girls' nature-study clubs, corn-growing contests, and the like, have all aided in strengthening the movement.

For the purpose of securing definite information on some phases of the status of agricultural education, a questionnaire was sent to the state superintendents, the presidents of normal schools, and presidents of agricultural colleges in the United States. Forty-six states and territories were represented in the responses. The information given is based on the respective opinions received from these three sources. Some replies were incomplete, on account of lack of information on the part of those responding.

In 1897 none of the states report giving agricultural instruction in rural schools; the recent data show forty-four states giving such instruction. Fourteen of these have laws requiring it to be taught in the rural schools; twelve require it in the graded schools; Texas designates schools with less than 300 scholastics as being required to teach it; ten states require it taught in the high schools; eleven more states are planning to pass such laws. In some of the states there is no specific law, but authorities are free to introduce the subject. Twenty-eight states have laws that permit agriculture to be taught.

While agriculture is said to be taught in the elementary schools of these forty-four states, only thirteen claim that instruction is at all uniform thruout the state. Five others report "fairly so." Eighteen states publish courses in agriculture for rural schools, and ten publish courses for high schools.

In 1897 there was but one agricultural high school; now there are about one hundred; seventeen states report having such schools. Twenty-three states now report high schools giving agricultural instruction; probably there are several thousand of them. The total of figures given was 1,200, but a number of states simply reported "many" without giving exact figures. The government report shows that two years ago there were only eighteen high schools reporting such instruction. The course has been also added to numerous county normal training courses.

The agricultural high schools have more or less extensive farms and are equipped with buildings, with animals and machinery, and give courses in all farm practices.

Some inquiry was also made concerning nature study. Sixteen states require such teaching; fourteen others report that it is strongly urged. Twenty-six states report giving nature study and agriculture. In many countries of Europe this tendency is also very strong.

There seems to be a tendency to teach agriculture as a separate study. Thirty-eight states report such a method. Of these, twenty-four also report correlating agriculture with nature study in the grades and with science in the high school.

The report from West Virginia is significant because of its statement, "Nature study with agriculture." We have been accustomed to saying "Agriculture with nature study."

The normal-school men of New Mexico say that the state board of agriculture urges agriculture rather than nature study, and Georgia reports "agriculture rather than nature study."

The following states report correlating nature study with geography: Georgia, Missouri, New York, South Dakota, Illinois (in the normal school at Macomb), Nebraska, New Mexico State Normal, and Washington State Normal at Ellensburg.

The new Nebraska course of study for the elementary schools, issued May 5, 1909, provides a course in agriculture correlated with the course in geography as a science branch running thru the eight years of the elementary course. In the first two grades the work is outlined under the heading "Nature Study." In the third grade the work is continued under the heading "Oral and Observational Work in Nature Study and Geography," with a decided turn toward home and industrial geography. Beginning in the fourth grade and continuing thru the fifth, sixth, and seventh grades the work is outlined under the heading "Geography," with the work in agriculture well correlated. In the eighth grade the work is outlined as "Geography and Agriculture of Nebraska."

The correlation of agriculture with the common branches should go further than geography and nature study. In the regular work in arithmetic, problems should be provided which involve the actual working-out of real arithmetic problems connected with the work of the farm and the home. This should be continued in the work in bookkeeping. The course in history and civil government should give attention especially to the development of agriculture and other industries in the country, with special application to the home state.

The study of physiology and hygiene should not be limited to that of the human body. It should include the physiology and hygiene of farm animals, with especial reference to physiology and hygiene as related to the care, feeding, and use of farm animals, and the utilization and disposal of products therefrom. When properly presented these become a very interesting and profitable education in home economics of as great value to the girl as to the boy.

The course in reading should include selections from our best authors which emphasize attractions of country life and of home life generally. Picture study should give attention to the study of pictures which find a response in the daily home life of the pupil. The pictures on the walls of our rural-school buildings should represent in proportionate number and artistic value the degree of interest the child should have in home scenes and home life, in comparison with the interest he should have at this time in his education with the ruins of Athens and Rome, and other far-removed subjects, which so often monopolize the space on schoolroom walls to the exclusion of life-breathing subjects which educate in more than mere art, and at the same time give art its best recognition.

The course in grammar and composition should be vitalized by providing for the reproduction, in written and oral statement, of the associations of the child in his play, his work, and other home and school relationships. The proper use of nouns and verbs will then come to the child as a necessary accom-

plishment for the expression of his own thoughts which are a delight to him in both meditation and expression. Such work will help to eliminate the terrors of written composition and oral recitation.

The technical study of agriculture should not come before the high school and should be technical in only the agricultural high school. The whole problem in elementary industrial education is one of adaptation to the environment of the schools.

Any form of industrial education which is closely related to the development of the broader life of the child and which can be correlated with the regular work of the public school should become a part of the general education of the child.

The boy and girl educated in the city should receive in their education such introduction to agriculture as will acquaint them with the importance of agriculture as our great national resource, and give them a vision of rural life which will furnish an outlet for their ambition to find a place in the business and social world outside of the bounds of their community life, when they arrive at the time of choice of vocation. The child of the city school has as much a right to demand an insight into country life as has the country child a right to demand an insight into the city. For that reason agriculture is a study which should not be entirely omitted from the course of study in the public schools of any state or community in the United States.

Thirty-nine state superintendents report that there is more or less of a demand for agricultural education in their states; seven question whether there is such a demand. Reports from agricultural colleges indicate that there is a demand for agricultural education, but that such demand is now vague and unorganized, and that the first task is to create an understanding of the work and an interest in it.

The reports asking for the source from which the demand comes indicate that the demands come very largely from normal schools, agricultural schools, and superintendents rather than from pupils, parents, teachers, and farmers. Except in the most progressive farming communities, the demand for agricultural education will yet continue to come for some time from educators, rather than from the farmers themselves, or from their children, or from the teachers who teach their children. This is one of our greatest problems in promoting agricultural education.

Fourteen states report organizations known as boys' and girls' clubs, which have for their purpose some line of agricultural education. This is one of the newer features of the work, and one which has done a great deal toward stimulating interest in the study of agriculture and home economics. The movement encouraging boys' and girls' clubs has exerted a strong influence in the establishment of agriculture, home economics, and manual training as parts of the public-school curriculum.

The most significant item in the present status of agricultural education is the attitude toward it. My investigations show that even yet the demand for

education in agriculture comes as a whole more from educators, business men, and others looking toward the better development of our country and the proper education of our people than it comes from the average farmer.

The day is rapidly passing when the farmer asks to be let alone to provide for himself, maintain his home, and live his life apart from the related business, educational, and social world. The advanced price of labor has led to the combination of head and hand work which gives the strong pair of hands increased effectiveness in results. The advancement in farm values has opened the farm arithmetic to the pages which ask for solutions of problems concerning the necessity of increased returns coming by means of proper seed selection, better cultivation, and more economical practices in disposal of farm products. The question of plant development, soil tillage, selection of feeds, care of farm animals, and other questions relating to the production and utilization of farm products in the most economic manner has led to the recognition that agricultural education pays as a business investment. The gaining of knowledge concerning agriculture has led to the development of a science and an art, which offer to the student a most fascinating study, an intellectual development, and a moral uplift which places agriculture in the foreground as a basic science and, in its higher degrees of development, as an art.

In Nebraska we now have more than four hundred high schools offering courses in agriculture. In establishing these courses we worked from the generally accepted idea that agriculture is so dependent upon geography, geology, botany, physics, chemistry, and zoölogy, that a fair knowledge of these subjects is necessary before the student is in the right attitude and position to take up the study of agriculture. This yet applies in considering agriculture as a technical science. But in considering agriculture as related to primary and secondary education, it is my opinion that agriculture should be the introductory or basic branch in elementary science. With the proper introduction and correlation thru the study of elementary agriculture, our boys and girls will approach the study of botany, geography, physics, physiology, chemistry, domestic science, geology, zoölogy, and civics with a degree of interest and an attitude of love and intensity that will bring from these various branches results which cannot be secured from the child who approaches these subjects without such introduction, and to whom these subjects too often appear as dry, dead matter yielding only mental discipline and class credits. Elementary agriculture properly correlated opens the way thru the known and experienced to the unknown fields of investigation in the other sciences.

Why should not the study of botany begin with that of a plant with which the child is or should be familiar, a plant associated with his home interests, one which he can see with his eyes and feel with his own hands, which brings a message thru the senses of taste and smell—a plant which means beauty in the home, food for the table, a product for the market, and credit at the bank?

Shall we first stimulate the interest of the child and help him properly to value the beauty and utility of the known plants about him, or shall we force

him to learn of intricate parts, with distressing names, of plants beyond his field of observation and without his atmosphere of interest? Shall we in the corn belt teach him first of the beautiful and useful corn plant, or force him to analyze, classify, dissect, make drawings of and deliver orations on the liliaceae, primulaceae, leguminosae, rosaceae, and compositae? Shall his introduction to zoölogy begin with the chimpanzee, the boa constrictor, and the giraffe, or shall he learn first to know and to love the cow, the hen, the horse, the pig, and the sheep?

The analysis of a chicken can be made as profitable as that of an oyster or a lobster. We have the chicken. Why not consider the health of the cow, the vigor of the horse, the disposition of the hen, the nervousness of the sheep, the self-satisfaction of the pig, and the temper of the dog; how these animals are constructed; how their health is guarded; how their exercise is regulated; how their bodies are trained into forms of beauty, service, and sale? Are not these phases of physiology and zoölogy which will help the pupil to a better understanding of the science of human physiology, and lead him to an intelligent interest in the domestic animals about him?

Knowledge of the mechanics of farm and household machinery makes an excellent beginning in the study of levers, pulleys, and the foot pound. The action of heat, water, and air on soil; drainage of the yards, fields, and roads; erosion, seepage, road-making, fence-building, irrigation, soil composition, bread-making, fruit-canning, care of milk and its products, preserving and curing meats, vegetables—I need not enumerate further—are these not fitting introductions to the study of physics and chemistry? And are not all the doings on the farm and in the home truly educative when properly conducted? Are they not fascinating when properly presented? And will they not open and create an inviting way to the formal study of the other sciences?

Our greatest encouragement is in the rapidly changing attitude toward agricultural education. Agriculture bids fair to become soon our most popular science in elementary and secondary schools. Its value as a practical subject, appealing to the everyday business and social life, is exceeded only by its value as a disciplinary study and as an ethical training second to no other.

When agriculture becomes properly established in the courses of study in the public schools from the kindergarten to the twelfth grade inclusive, thru its correlation with the sciences, language, and history work, the student will find a satisfactory relation between his school work and the home life which will cause him not only to have a greater degree of contentment, interest, and intelligent activity in all duties and relations of the home, but his work as a student will be intensified and vitalized by the interest acquired therein thru the associated knowledge and experience which his home and community bring to the work of the school.

THE CORRELATION OF HIGH-SCHOOL SCIENCE AND AGRICULTURE

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Agriculture as an organized subject is now taught mainly in the agricultural colleges established under the Morrill Act. It is a fact that much of the work presented in such colleges is not of collegiate character and is given there chiefly because it must come somewhere in an agricultural education and has been omitted from all previous school work of the student. A glance at the catalog of such colleges also betrays the fact that certain of the sciences, notably preliminary courses in botany, chemistry, and physics, are prescribed to precede much if not all of the agricultural work. An examination of the courses prescribed in the purely agricultural school of secondary grade, to which some of the friends and some of the opponents of agricultural education would have this work below the colleges relegated, discovers the fact that they are attempting to give pretty much the same practical work, minus much of the science requirements, that the colleges do. Finally, turning to the courses of study of the best high schools of the traditional type, we find science courses as recommended by the best authorities given without any agricultural or other application of them. We are forced to believe, therefore, that there is a phase of both agricultural and science work proper for secondary schools and that below the agricultural college these two phases of science, the theoretical and the applied, are being arbitrarily kept apart.

The proposition here is to show how these mutually dependent phases of science work may be correlated in such a way that each may immeasurably enhance the value of the other, and to emphasize the necessity that each pupil who may be taking the science for either culture or practical purposes take both phases of it. And it would work in the interest of administrative economy to accomodate both types of students in the same class. The purpose is to show that it is not only a pedagogical economy but a pedagogical necessity. For when we consider that nearly every important order of plants and animals has representatives of economic importance, and that the principles of chemistry and physics have application in the arts and industries, we realize that the study of science for cultural purposes may as well be illustrated mainly by materials that the industrial student must use. And when we consider, on the other hand, that no fact or principle of science, however abstract, and no organism, however insignificant today, but may by some invention or change of environment or adaptation become of the greatest economic importance tomorrow, we must admit that a common ground of agreement on subject-matter of study is feasible. Then when we reflect that the industrial student needs a broader vision than could be obtained by providing merely for his material needs, while the student who seeks culture only cannot get it by leaving out the necessity of applying in some way every bit of knowledge he acquires—

in other words that nature will not be cheated—we must admit not only the economy, but the necessity, of having both types of students in the same class to correct each other's tendency to unsymmetrical development.

Following are a few illustrations of the advantage or necessity of correlating science with agricultural work. Some of the examples go much farther in demonstrating the necessity of a knowledge of the fundamental sciences in dealing with the great social problems of the age. Some of them illustrate as strikingly the fact that the benefit of correlation inures as well to the fundamental sciences as to their application in agriculture.

The only general system of *soil classification* is based upon the physical properties of the soil and dependent in great measure upon the size of the soil particles. Since the only natural or laboratory method of separating a soil into its particles is by gravity, a knowledge of *specific gravity* is fundamental in soil work and is best studied by simple experimentation before applying it to agricultural purposes. One of the chief purposes of *tillage* is to control *capillarity*. The laws of capillarity are best demonstrated in the physical laboratory. *Drainage* and *erosion* involve *hydraulics*, which is much more easily illustrated by the simple physical apparatus of the laboratory.

Cause and effect of *weather phenomena* are too complex for anyone to understand who has not studied the *laws of gaseous bodies* as an independent subject.

Chemistry is the basis of *soil fertility*, and together with *soil physics*, *bacteriology*, and *plant physiology* determines the production of crops. With *animal physiology* it determines *animal production*. Physical *osmosis* by simple laboratory demonstration is a necessary preparation to a knowledge of plant and *animal nutrition*. Physical laws of *indestructibility of matter* and *correlation* and *conservation of energy* are conceptions without which the function of nourishment as applied to *fertilizers* and *animal rations* cannot be put on a safe basis.

The only recognized *value of food* is a *fuel value* measured in *calories*. The *calorie* must be learned as a physical unit before it has any meaning in foods and rations.

Bacteriology has heretofore been looked upon as an independent science. We are just coming to an appreciation of the fact that a big share of the function of *tillage* is the *control of soil bacteria*.

Habits of plant growth, *plant structure*, and *fruiting habits* are purely botanical subjects of study, but correct *cultivation*, *pruning*, and *propagation* are dependent upon this botanical knowledge.

Methods of *propagation* and *repression* of insects depend upon a knowledge of their habits of *reproduction*, their *metamorphoses*, and their *structure* as treated in the science texts.

Cell activity is a matter upon which intelligent treatment of *disease* depends, whether of plants, domestic animals, or men. Rules of *hygiene* without this knowledge are of limited utility.

The *literature of agriculture* is replete with the *terminology of pure science* and it can never be otherwise. Only in the pure sciences free from the complexities of agriculture can the accurate meaning of such terms be learned.

The *properties of protoplasm* seems an abstract subject of study until revealed by the microscope. Yet in the response of *paramecium* and *lumbricus terrestris* to the various tropisms is laid the foundation for the superstructure of *psychology* and *training for citizenship*.

Ecology is a recognized phase of all biological sciences and every modern text gives a large quota of space to the subject. A correct conception of man's place in nature is as an ecological factor and his influence is great or small in proportion as it is correct or incorrect *agriculture*.

Soil, plants, crops, farm animals, productiveness, prosperity, civilization, education, culture are a series of causes and effects dependent primarily upon *geology, physiography, and climate* as ultimate material causes. Progress in civilization has an uphill task when it goes contrary to geographic influences, whereas, going with those influences, its development is almost as free from conscious causes as was Topsy's. The 20-inch rain-fall line, the 50° isotherm, and the southern limit of glaciation determine the location of the corn belt—scientific causes which millions of years ago permanently decided not only the agriculture of the vast territory, but nourish a citizenship that is affecting the educational policy of the world.

Plant kinships are determined mainly by study of the various modifications of *stamens* and *pistils* as promulgated by Linnaeus and presented in the botanical texts. A knowledge of these family relationships is necessary to him whose business it is to understand the habits, properties, symbiotic and parasitic insects, diseases and uses of *weeds* and *economic plants*—the producer of crops. This structural relationship also has a much wider significance. To the uninitiated weeds are quite naturally relegated to a class distinct and separate from cultivated plants. As a matter of fact the study of botany shows some of the worst weeds to be closely related to some of the most valuable plants, as, for instance, the following: *butter print* and *cotton*, *bindweed* and *sweet potato*, *jimson* and *potato*, *mustard* and *turnip*, *pigweed* and *sugarbeet*, *crab grass* and *maize*, *smartweed* and *buckwheat*, *tares* and *bean*, and many other. Without the botanical study and these specific illustrations how can a pupil be prepared to appreciate the achievements and possibilities of *plant breeding*? How appreciate the fact that there is no valuable economic plant but is the work of generations of careful *selection* and *mating*, and that its value is usually proportional to the care that has been bestowed upon its ancestors since the day that it was nothing more than a weed surviving by *natural selection*? How else may the pupil be brought to appreciate the fact that no organism however mean but has unlimited possibilities for good in it if only its peculiar virtue be discovered and augmented by generations of *intelligent selection*? How better teach the dignity and responsibility of *husbandry* whose high purpose it is to receive from our fathers the cumulative effort in improvement which began with civilization; to maintain thru our short span the delicate poise in its ascent toward perfection each well-bred species has attained, where a single mistake or mesalliance may entail the loss of generations of careful selection; and to pass the various forms to our children a little higher in development and finer in quality than we received them?

This *structural relationship* may also be given an ethical significance still higher. What better basis for the lesson which each generation of children of a democratic government must be taught—namely, that no family is so highly cultured as to be secure from sudden precipitation to the depths if not properly safeguarded by education, nor so low in the social scale that education may not lift it to a position of the highest importance.

A knowledge of the nature and effect of *parasitism* is essential to scientific agriculture. Yet this is a purely biological study and no purely biological course omits it. Without such biological study who can appreciate the significance to the individual and to the state of the *commercial, political, intellectual, and moral parasitism* which curse society; how else may we put the selection of vocation on the proper ethical basis for youthful instruction; how else may we put meaning into the statement of the Great Teacher that "unto everyone that hath shall be given but from him that hath not shall be taken away even that which he hath" than to note the loss thru disuse of an organ of some such example as the hermit crab, which prefers to retire from the struggle which alone might develop its talents, or that "flat-patterned" type whose ancestors anticipated our modern commercial standard of success by undertaking to "get there" without wings?

We have recently recognized that *laws of mathematics* are at the basis of *heredity, variation, and correlation of characters*, and Dean Davenport in his masterly treatise on the *breeding of plants and animals* has put the subject on that safe basis. A knowledge

of *natural selection* is also necessary to intelligent selection by the breeder. And who shall be so bold as to fix limitations on this matter of *selective mating* for the betterment of the human species? The recent action of the legislature of the state of Washington in prohibiting marriages under certain conditions is a prophecy of the day when the direct relationship between *karyo-kinesis* and *eugenics* will be legally recognized and applied.

These instances, if they mean anything, illustrate that neither the fundamentals of agriculture nor the fundamentals of the social sciences can be appreciated by a mere authoritative statement of the natural laws behind them to one who has had no scientific training. Such principles can be acquired only by laboratory demonstrations without which experiences the most glaring mistakes are possible. They also illustrate the vital connection between the fundamental sciences on the one hand and the social sciences on the other, and that in the bridging of this gap is the peculiar utility of the study of high-school agriculture to one who may never practice farming.

The enumeration of the foregoing scientific principles does not necessarily signify that the science is to be developed to such extent as suggested here. It simply means that these great relationships should be appreciated by the teacher and developed in class so far as good judgment warrants in putting pupils on the proper tack for the utilization of their knowledge. They are mentioned with a belief that, for pupils of high-school age, agriculture as a school subject makes practicable for all purposes sciences which might otherwise be of questionable value, without affecting the method of presentation for purely agricultural purposes; and they are given to suggest a solution of a fictitious difficulty which schoolmen have inherited with accretions from a previous generation. For it is evident that in so far as agriculture is correlated with the sciences, it may readily pass as so much science without the necessity of any new method of estimation.

Correlation of science and agriculture is advocated because it works both ways, and thus pays for its space from either the cultural or the practical viewpoint. It adds nothing to the burden of a school that undertakes to satisfy modern requirements, and in fact tends to economize the time and effort of a school that undertakes to teach agriculture and the high-school sciences. Granted that the science topics are properly chosen and graded, and granted that the agricultural course is complete and well balanced, then it would seem the height of folly not to correlate the two mutually dependent phases of the subject, thus holding the science student to the necessity of applying some of his theories, and lifting the future farmer above the narrow limitations of rule-of-thumb practices, however correct they may be. Without correlation agriculture can never become a high-school subject, but will be put on a low plane and be judged by its own estimate. With it the agricultural work becomes an extension of the physical geography, botany, chemistry, or other science, and this agricultural warp crossing the scientific woof breaks down the artificial walls which we instinctively build up between subjects, and unifies all science.

Correlation has yet another very important advantage. Many pupils who

elect studies at the beginning of their high-school courses are unable to say whether they will ever see inside the walls of a college. Perhaps those who do not know are of as much importance to the college as those who know. Perhaps a course that may serve immediate purposes without stifling ambition is worth more educationally than one prescribed for definite educational ends, either cultural or practical. An uncorrelated agricultural course can fit for only one purpose—farming. It is not a preparation for even the agricultural college. Where election of a strictly agricultural or a non-agricultural course is enforced at the beginning of the high-school course, what is the university going to say to the agricultural graduate whose ambition later carries him to its doors for admission? And would the science student have impaired his preparation by a judicious admixture of applied science? Not if we may judge by the opinion of university science instructors who teach freshman classes. For those who get no more schooling than the high school provides, correlation gives an intimation of the connection between the fundamental sciences on the one hand and the social sciences on the other, to say nothing of its necessity for a correct knowledge of the factors with which the farmer must deal to the end of his days. If it be true that the school which undertakes correlation thereby elects to do less of agricultural practice, may it not also be true that the farmer with the scientific training has so much better mastery of the forces of nature as to outstrip in practice in a few years his more methodically trained fellow, and have something worthy to inspire his thoughts while he plows and tills and reaps?

AGRICULTURE FOR THE ELEMENTARY SCHOOLS

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The attempt to introduce into the schools a new line of work of any kind is always attended by two problems: First, the creation of a sentiment in favor of the work; second, the preparation of teachers to teach it. This statement holds good with reference to the attempt to introduce agriculture into the schools. The signs of the times seem to indicate that the first of these problems has, in a large way, been solved, and that all over the country there now exists a strong, healthy demand for this kind of work in the schools. But the second problem, which, by the way, is by no means an easy one, still calls for solution. Only a very small percentage of the teachers now in the schools have any intelligent idea either of the subject or of the proper method of teaching it. Very few of the normal schools, even, are sending out teachers with anything like a definite idea of what to do or how to do it.

In the paper which I have to present I shall try to outline a definite method of procedure in the preparation of teachers to teach this subject in the elementary schools. I shall try to make this so plain that, by following it, any teacher can, by reasonable application, prepare herself for the work. I admit, without hesitation, that there are imperfections in the plan which I have to offer, but

as conditions now exist in my own state (and they are duplicated, no doubt, in many other states), it is as good, I believe, as can be put into practice at the present time. As in everything else, so in the training of teachers to teach agriculture, we must begin with things where we find them; and since it is not possible to begin with a *perfect* plan of procedure, then let us begin with one as nearly perfect as possible, putting the latter aside as soon as something better can be used. At least let us begin giving to teachers *now*, those now in the schools as well as those going out from the normal schools, something definite to do and a definite idea of how to go about it.

With respect to what she is to do, it is not enough to tell the teacher that the material for a course in agriculture should be chosen from the environment of the school, that it should be selected with reference to the season, and that it should be something adapted to the mental capacity of her pupils. This might do, and would no doubt be the better way, if all teachers were competent to construct courses of study. In no other elementary-school subject do we lay down the principles which should underlie a course of study and leave it with the teacher to construct the course. Why should we do so in agriculture, a subject which the teacher has never studied and one in which by far the greater part of the work lies outside of any textbook? Since the great majority of teachers are utterly helpless without a course of study, it is my opinion that the teacher should be given, at least to begin with, a definite course of study in agriculture.

The course in agriculture for any school should be determined largely, of course, by the environment of the school; hence it follows that a course which would be suited to the schools of any large area, a whole state, for instance, could contain comparatively few topics. But this limitation would be no great barrier. There are at least three reasons why the course in agriculture, to begin with, should be short: First, the teacher will find it much less difficult to prepare herself on a few topics than to prepare on a wide range of topics; second, it is better to have a few topics well taught than many only superficially treated; third, with the present crowded curriculum, it is impossible to carry out any very extensive course in agriculture. The course should include animals and plants common to large areas (such as the domestic animals), beneficial and injurious insects, and other animals of economic importance and of wide distribution, field-crop plants, and subjects of general interest in every locality, such as forestry and the weather. It should also include a line of experiments, to be carried on both indoors and outdoors, which should illustrate clearly the relation of the plant to the soil, air, water, and sunlight. Window-gardening in boxes, pots, cans, and egg-shells should be made a part of the course.

It would be well to arrange the course so that in rooms where all the eight grades are present there shall not be more than two classes, and, further, so that pupils who pass regularly from the first class to the second, and from the second to the high school shall not be compelled to repeat any part of the work.

To meet these conditions I have devised for the use of the elementary teachers of California a course which I deem not inappropriate to call a "rotation" course. For the administration of this course the eight grades are divided into two sections. Grades one to six inclusive constitute the first section, and the seventh and eighth grades the second section. The course for each section is divided into as many parts as there are grades in the section and each section is to complete one part each year. Each part of Section I is thus repeated every six years and each part of Section II every two years. Following is the course in full:

SECTION I (Grades 1-6)—

Part 1. Cow, Snail, Bee, Fish, Earthworm, Rabbit.

Part 2. Ant, Toad, Mosquito, Bat, Cabbage Butterfly, Gopher.

Part 3. Snake, Horse, Plant Lice, Seed and Plant Dissemination, Galls and Gall Insects.

Part 4. Spider, Hen, Grasshopper, Sow-bug, Codling Moth, Plant Diseases (pear blight, potato scab, rust and smut of grain).

Part 5. Cat, Crow, Filaree, Scale Insects, Irrigation and Dry Farming, Grape and Its Enemies (animal and plant).

Part 6. The Weather, Forests (use and abuse), Eucalyptus, Migration of Birds, Economic Relations of Birds, Alfalfa Plant.

(The course for Section I might more properly be denominated nature study, while that for Section II is more strictly agricultural.)

SECTION II (Grades 7-8)—

Part 7. Experiments to show that plants need water, air, warmth, light, carbon, nitrogen, and sulphur; preparation of oxygen; illustration of oxidation; preparation of hydrogen, of nitrogen, of lime water, of carbon dioxide; experiments to illustrate osmosis and capillarity; preparation of phosphoric acid, potash, and saltpeter; illustration of and tests for acids, alkalies, and salts; tests for acid and alkali soils and correction of each.

Part 8. Experiments to show that soil water holds plant food; that amount of film moisture depends on size of soil particles; to show rapidity of percolation in different kinds of soils; to illustrate evaporation; to show that plants transpire; to find where transpiration occurs; to show that water rises thru the plant stem; how the plant lessens transpiration; that chlorophyll, sunlight, and air are necessary for starch-making; that growing plants give off oxygen; tests for starch, sugar, proteid, and fat; to show the regions of food storage in plants; propagation by grafting, budding, layering, cuttings, etc.

(Each of the principles illustrated by the above experiments should be fully discussed in its relation to agriculture as the experiments are performed. The work in Section II may or may not be accompanied by a textbook.)

Where only the first six or any smaller number of grades are present in a room, it is necessary, according to this course, to have only one class in agriculture. In case only the first three grades are present in a room Parts 1, 2, and 3 of the course are used and repeated every three years; if only the first five grades should be present, the first five parts of the course are taken and repeated every five years. The course will thus be seen to fit the elementary school of any number of grades, and to require a minimum of time for its execution. To those who would object that pupils of the first six grades should not recite together I would say that long experience has shown me that the average sixth-

grade pupil knows little more about nature when he comes to school than do those of the earlier grades. Then, too, the easier questions may always be referred to the younger pupils for answer and in the event of their failure to answer referred successively to the higher grades. Thus the interest of the younger pupils will be sustained while the older pupils will revel in the opportunity to show how much more they know by answering the difficult questions referred to them. Should the younger pupils tire before the end of the recitation they might be given some busy work, like drawing or modeling, correlated with the topic under consideration.

When the teacher knows definitely what she is expected to teach she should then know how to teach it to obtain the best results. Of this most teachers are as ignorant as they are of the subject-matter. Only a very small percentage of the teachers have ever studied agriculture or nature study, a still smaller percentage have ever studied it in any proper way, and their study of science in the high school and the university has generally given them little or no idea of the method to be used with pupils in the elementary school. The teacher should be given definite suggestion as to how to proceed with the work. Some ten or twelve years of experience as teacher and supervisor of nature study inclines me to believe that the "development method" is the best method to pursue in this work, taking up the study of each topic at the point where it comes most closely in contact with the life of the pupil. This method is well illustrated by the following questions taken from an illustrative lesson on "The Cow": "What did you have for breakfast this morning? Where did the milk come from? How many have seen a cow? Several pupils may tell their experience with cows. What must we do for the cow if we want her to furnish us with milk? What besides food? Of what does her food consist? Which of these foods does she like best? Why? Why, then, is hay given her so often? Discuss the making of hay, kinds of hay, relation to grass, etc. How often do cows eat? Compare with man and account for man's eating three times a day, and ill effects of eating between meals. How much can the cow eat? Why necessary to eat so much? How much can she drink? Does she drink more or less than the horse? Why? How often should she have water? Is all water good to drink? What kind of water do you like? What kind is best for the cow? Why? What should you do with drinking water that is very cold? Why? Does the cow know enough to do this? If the water is ice-cold what should be done with it before giving it to the cow? What should be done with hay that is very dusty before giving it to the cow? Why? How should bran be treated? Danger in feeding apples, turnips, potatoes, etc., to cows."

Two or three topics worked out quite fully after this fashion and placed in the hands of the teacher would give her a tolerably clear insight into the method recommended. These illustrative lessons should be accompanied by a list of points to be emphasized in presenting the work. The following are some of these: Always conduct the lesson when possible in the presence of the

living thing. Disputed points should always be settled by observation, the only scientific way to settle them. Make free use of experiments, demonstration, and drawings in presenting the work. Where possible keep the living animal or plant studied in the schoolroom for continuous observation. Bring out as often as possible the agreement or conflict of interests between the thing studied on the one hand and man on the other. Tell the pupil absolutely nothing which he can find out for himself by a reasonable expense of time and effort. In every instance approach structure from the viewpoint of function. If, for instance, it be desired to draw attention to the claws of the cat it would be well to ask, "How does puss hold the mouse after she has pounced upon it?" Make all questions definite. Avoid questions which can be answered by "yes" or "no." Bring out humane methods of treatment of animals wherever possible. The specimen lessons should illustrate all these points so far as possible, and the teacher should be asked to make a critical study of the questions to see that this is so.

In this connection the teacher should be given some practical directions as to how best to prepare herself for conducting the lesson. She should be told that to secure the best results the whole topic should be thoroly worked up before the first lesson is given; that this preparation should consist, first, of much observation, and, second, of wide reading, this to be followed by a second observation to confirm new points gained from the reading; that all the facts which are to be presented should be woven into a well-organized outline so that the entire subject shall be unified in the teacher's mind; and, finally, that this outline is for her own use rather than that of the class.

When the teacher has learned what she is expected to do, and something of how she is expected to do it, she should be told definitely how she may obtain literature which will be directly helpful in carrying out the course. What she needs is not so much the literature which deals with theories and principles, tho that has its place, but literature containing information ready for use. Now much of the most helpful literature treating of topics in the above course can be obtained free in the form of bulletins from the Department of Agriculture and the various state agricultural experiment stations. The teacher should be furnished with a brief list of those bulletins which will be found particularly helpful to the beginning teacher. These should be referred to by number and name, and the name and address of the station issuing them should be given. For instance, Bulletins 116 and 152 of the Kansas experiment station give a valuable fund of information concerning the gopher; Bulletin 155 of the same station, alfalfa; Bulletin 67, of the Montana station, the bee; Bulletins 46 of the Massachusetts station and 91 of the Kentucky station, the toad, etc. Besides these every teacher should be furnished with a complete list of the agricultural experiment stations in the United States, of the Audubon and humane societies, of tree-growing clubs, horticultural and agricultural societies, and the like. Teachers should be encouraged to collect and arrange, in every school, a library from the above-named and other sources, and to this should

be added pictures and articles pertaining to agriculture culled from the magazines and brought in by the pupils.

In the foregoing remarks I have tried to show how the work in agriculture in the elementary schools may be made effective—namely, by working with the teacher and helping her to meet the practical difficulties which arise. But who is to do this? I want to suggest in closing this paper that there should be in every state, either at one of the state normal schools, or at the state university, a central bureau to which teachers can appeal for help. From this bureau should be sent out to teachers, in anticipation of their needs, printed information—in the form of leaflets, perhaps—giving help along the lines indicated in this paper. This is the plan I have put into operation in California. Not only have the things recommended in this paper been placed before the teachers but they have been furnished with the directions in detail for carrying on the experiments in Section II of the course of study, together with suggestive notes on the same. It is my purpose, the coming year, to send out to teachers, in leaflet form, concise information concerning those topics in the course about which it is difficult to obtain printed information. In the meantime at the normal schools we are preparing teachers, by study of the principles underlying the subject, to construct for themselves courses of study suited to the various localities into which they go to teach.

After a careful study of the situation I am convinced that it is only in some such way as that outlined in this paper that the work in agriculture can be made really effective in the elementary schools.

DEPARTMENT OF WOMEN'S ORGANIZATIONS

SECRETARY'S MINUTES

OFFICERS

President—MISS LAURA DRAKE GILL, president of Ass'n of College Alumnae, Washington, D. C.

Vice-President—MRS. SARAH S. PLATT DECKER, Educ. Council, Teachers' Ass'n, Denver, Colo.

Secretary—MRS. MARY D. BRADFORD, Prin., Training Dept., State Normal School, Whitewater, Wis.

FIRST SESSION.—TUESDAY AFTERNOON, JULY 6

The Department met in joint session with the Departments of Child Study and Physical Education.

(For program see Department of Child Study.)

SECOND SESSION.—THURSDAY AFTERNOON, JULY 8

The Department met in the Woman's Club Rooms at 2:30 P. M., and was called to order by the president, Miss Gill, who in a few words expressed the gratitude of the Department for the welcome given by the Woman's Club of Denver.

The program was opened by Mrs. Alice Schatelowitz, who sang a Finnish lullaby and a Finnish love song.

The first paper, "The Constitution of the Ideal School Board, and the Citizen's Duty toward It," was presented by Mrs. Helen L. Grenfell, field lecturer, State Agricultural College, Fort Collins, Colo. Mrs. Sarah S. Platt Decker, member of the Educational Council of the State Teacher's Association, Denver, Colo., discussed Mrs. Grenfell's paper.

"Delinquency and the Responsibility of the School toward It" was the subject of a paper presented by Joseph A. Bache, superintendent of the Jewish Training School, Chicago, Ill. This paper was discussed by Charles C. Merica, president of the University of Wyoming, Laramie, Wyo., and also by Mrs. Alice H. Hinman, vice-president of the Board of Education, Lincoln, Nebr.

The following were appointed by the president as a Committee on Nominations:

Mrs. Sarah S. Platt Decker, Denver, Colo.

Mrs. Sanford Bell, Denver, Colo.

Miss Rose Summerfield, New York, N. Y.

Mrs. Alice Hinman, Lincoln, Nebr.

Miss Mary H. Johnson, Nashville, Tenn.

Miss Gill reminded the members of the constitution of the committee to plan work for the coming year: It consists of one member from each of the five national organizations comprising the department, the same to be appointed by the respective presidents; these five to act in conjunction with the three members of the executive committee.

The following recommendations were presented:

1. That the officers of the department be chosen for a term of two years.
2. That the president be chosen in even years, the vice-president and secretary in odd years.
3. That in 1909 the president be chosen for one year; the other officers for two years.

A motion for the adoption of these resolutions was carried.

ROUND-TABLE SESSION.—FRIDAY AFTERNOON, JULY 9

The meeting was called to order at 2:30 by the Vice-President, Mrs. Sarah S. Platt Decker.

The discussion of the first topic, "Amusements," was opened by Mrs. Sanford Bell, of Denver. She was followed by Mrs. Davis, of Texas, Miss Brown, of New Orleans,

Miss Sadie American, of New York, Mrs. Fannie Fern Andrews, of Boston, and Mrs. Merriweather, of Colorado.

"Colorado" was sung by Mrs. Smith, of Denver.

Miss Theda Gildemeister, principal of the Elementary Department, State Normal School, Winona, Minn., opened the discussion of the second topic, "Study at Home." The discussion was continued by Miss Davis of Texas, Mrs. Sanford Bell of Denver, and Miss Marion Brown of New Orleans.

The third topic, "The Parent's Obligation to the School," was presented by Mrs. Henry J. Hersey, president of State Congress of Mothers, Denver, Colo.

The Nominating Committee reported as follows:

For *President*, Miss Laura Drake Gill, President of Association of College Alumnae, Washington, D. C.

For *Vice-President*, Mrs. Hugo Rosenberg, President of Council of Jewish Women, Pittsburg, Pa.

For *Secretary*, Mrs. Orville T. Bright, President of Illinois Congress of Mothers, Chicago, Ill.

The report of the committee was adopted, and the secretary was instructed to cast the ballot of the department for the officers nominated, after which the persons named in the report were declared elected.

The meeting then adjourned.

MARY D BRADFORD, *Secretary*

PAPERS AND DISCUSSIONS

THE CONSTITUTION OF THE IDEAL SCHOOL BOARD, AND THE CITIZEN'S DUTY TOWARD IT

MRS. HELEN L. GRENFELL, EX-SUPERINTENDENT OF PUBLIC INSTRUCTION,
DENVER, COLO.

This is one of those large, indefinite subjects that, according to the plaint of the White Queen in Lewis Carroll's *Through the Looking Glass*, "fill one's head with ideas without telling you what they mean."

Is this perfect board to serve in a city of several million inhabitants, in a country town, in a small city, in the country, or in some remote mountain glen? Will its chief duties be dealing with those questions that afflict the congested districts, or will it have to devise a plan by which to get a teacher capable of inculcating a knowledge of geometry, spelling, and the English alphabet to some twenty children ranging from six to eighteen years of age, at a stipend of thirty dollars a month and "find yourself"?

The ideal board for the citizens of Rocky Gulch, with eight children of school age in the district, is not the ideal for Chicago. Before anyone can decide upon the qualifications which would create the perfect board, it is first necessary to find one's district. Given a country school, properly heated and lighted, having ample room for all the pupils (which, unfortunately, is a rare occurrence), and the duties of the board are simplified, centering largely around the selection of a teacher. Given the crowded city school and the case is entirely altered.

For the sake of brevity, let us assume that the board is to have charge of the

schools of a city, since, while one city differeth from another in the glory of its school system, there is a great similarity of problems. Denver, Chicago, and New York children alike suffer from overcrowding and undereducating.

Having thus narrowed the field, there remain two ideals of ideal school boards: one of these is the conception of the school board as a purely business body, which employs a superintendent capable of running the schools properly, so far as education itself is concerned, and leaves all the technical details to him, while it contents itself with looking after the financial interests of the district, the buildings, the grounds, and the sanitary conditions.

The other ideal brings the board in more vital contact with the schools themselves, the teachers, and the pupils, by no means omitting the weightier matters of the law, such as salaries, bond issues, and insurance. To serve on this second board, and escape the reputation of being a meddler, would require the wisdom of Solomon, the subtlety of the original serpent, and the patience of Job, and persons of that description are not crying in the streets nor from the house-tops for nominations on school boards. In my opinion this second ideal is more nearly the true one, yet it is the first we chiefly attempt to realize. If the "business" board sees its whole duty and does it, there will not be much cause for complaint in its community, for the business board will insist upon the best returns for its money, and it will have very distinct ideas as to what constitute such returns. This board will never cease to remember that it is educational results it is after, not massive buildings. It will ask "Will it pay?"—not merely as an investment in real estate, but as an investment in mind and brain. It will not figure out the per-capita cost alone, but the per-capita result. It will ask why it pays so many millions for education each year, only to find that more than 25 per cent. of those educated have to take the same grade again. This is not "business;" only in rare cases is it politics; it would seem to be either stupidity or bad management, and as teachers do not manage the schools and are not supposed to be eligible if stupid, the onus comes back upon the board, and if a good one, it will straightway set about finding the leak. No business in the world could go on with such a loss as that, and the education of children, which is the most vital business in the world, would not go on in that way if it were in charge of men who conducted it according to a business ideal worthy of recognition in the business world.

The leak discovered, what will the ideal board do? It will set about finding the schools where it occurs, and the pupils who are delinquent. It will find, as a rule, that disease, poverty, or some of the allied conditions are back of the delinquency. If the child is physically defective, it will endeavor to remedy those defects; if he is mentally lacking, it will place him in an ungraded school or, if the conditions warrant it, in a proper special institution.

If the delinquency is caused by sickness at home, the employment of trained nurses, who go from house to house performing the duties otherwise devolving upon the child, leaves him free to go to school. Comparing the cost of such nurses with that of the child's repeating a whole year in school, the board will,

as a business proposition, employ the nurses, as is now being done in many cities.

When the child is taken out of school because he must become a breadwinner, the board will consider whether or not the present use of public funds may avail to save him from a place in the bread-line later in life, and if it is as conscientious as an ideal board should be, even from the business standpoint, some member who is acquainted with bread-lines will remember that there never was a bread-line three blocks long without at least two college graduates in it, not there merely for the experience.

Of course the graduate is there not because of his college training, but in spite of it; but the reflection that will trouble the board will be the question whether his education has done all that it might have done to make him self-supporting. Not 1 per cent. of the children with whom they have to deal will ever see college, but it seems not improbable that a perceptible percentage may see the bread-line unless industrial and economic conditions change. Nothing can be worse, from the business standpoint, than a bread-line. It reflects upon the city that has it, and keeps capital away. It reflects upon the whole country, and it would reflect upon the human race if it were not that all of us live in glass houses and are nervous at the mention of stones.

At this point the business board will look over its schedule of expenses for the coming year and decide that if economy is necessary it is better to practice it in the high schools than in the grades, and if it is a board of quite superhuman wisdom, or has a woman member or two, it may even feel that it would be better to sacrifice its "nature studies," taught in a way to make it appear that "nature faking" is a part of our regular curriculum, and its questionable attempts at reproducing that which never was on sea or land, and put in domestic science or manual training, since it is manifestly right that American popular education should be planned to meet the needs of the majority and it is in the main a plain, hard, workaday world in which our children must play their part.

The ideal board, given that support which is its due from the citizens, will not keep in disuse for a quarter of the year its entire educational plant, representing an investment of many millions of the people's capital. The long months of disuse and idleness are a misfortune to the child, meaning so much lost time and energy which could be spent on certain phases of industrial work, nature study, and the cultural branches, so called, relieving the tension of the schoolroom during the rest of the year, and keeping the child from that idleness which is demoralizing and which renders his momentum very difficult to regain when he re-enters school. In no other line of work could such a waste be permitted. And thru the efforts of the ideal board will we reach the realization of what it is possible to accomplish thru the full and constant use of educational properties. Among such properties we shall reckon playgrounds, for they will be provided by the ideal board just as certainly as teachers are provided.

I have always felt that when Robinson Crusoe set down those parallel columns of troubles and blessings, he did not write them alternately, but first made a list of his afflictions, and when he could think of no more, then began to remember his mercies. While Cassandra would doubtless have been a trying person to live with, as a member of a school board she would have been invaluable. She would keep any board so busy trying to prevent disasters that when a new building was to be erected the fire escape would be set up first.

In this connection there are a few material changes in the building of schools that the ideal school board would inaugurate just as soon as elected. In so far as possible it would substitute the group school for what might be called the barrack school. In great cities this may not be possible, but in the smaller ones it is. The ideal school never has more than eight rooms, or two floors, or thirty pupils in any room.

The advantages of a school of this kind are many and obvious. In case of an epidemic, only a small number of children are affected, and this is also true in case of a moral epidemic, and long ago Dickens made clear the fact that we should go to at least as much pains to prevent ethical as physical contagion.

With this number of pupils there need never be more than sixty children on the playground at recess times; this in itself is no small advantage. The number is still too large for the teacher to get the best possible results, but it would enable her to become acquainted with her pupils. With only fifteen boys in a room each boy would possess a personality of his own; with but fifteen girls, each girl would emerge from the group with an individuality of her own; she would be something more than bright or stupid, dark or fair, well or badly dressed, a joy or a trial to be sent on to the next grade as soon as possible.

And just as the smaller number of pupils enables the teacher to get a better idea of them, it makes it at least remotely possible for her to know a little about their homes, and in schools where there are parents' meetings—and this ought to include them all—the small class makes possible a harmony of spirit and unity of action among the parents, teachers, and pupils that is utterly out of the question in one of our enormous schools with from twelve hundred to two thousand pupils, and two shifts a day, with from eighty to a hundred children in a room.

Merely as a matter of business, the ideal business board, remembering that the teacher is the one absolutely necessary element in every school, will fix a salary schedule that we will not desire to keep hidden, even if our buildings must be on a less elaborate scale. Fortunately a majority of our teachers really love their work and find compensation for meager pay and petty annoyances in the realization that they are truly builders of the nation in building for the child. But suppose the president of the board is a banker, or an attorney, and he finds that it is the exceptional teacher who receives anything like the salary he expects to pay a competent clerk, who may reasonably hope one day to enter the firm and, retiring, be able to live upon his income at about the same

time that the teacher is wondering whether upon retiring it will be possible for her to live upon her pension, if she is lucky enough to live in a state where pensions are provided for teachers, and has a faculty for living the simple life. If there is no pension—well, the poor-house we have always with us: this is a thought which must have sustained many a school teacher during her declining years. At this point, if the president has any sense of humor—and if he hasn't he isn't fit to serve on a school board—he will recall Mark Twain's story of the Mississippi pilot who fell from grace, and whereas he had often received one hundred and fifty dollars for piloting a boat over one particular part of the river, was glad at last to undertake it at forty dollars. When the boat stuck on a sand-bar and the captain berated him, he explained that he was doing the piloting just as well as was possible for forty dollars, and better than most forty-dollar pilots. There isn't a schoolhouse in this broad land where men and women are not expected to pilot the youth of the country over rapids, thru narrows, and past sand-bars at salaries which would be scornfully refused by the demonstrator of a new brand of baking powder. Everywhere we exact, and what is more remarkable, often receive one-hundred-and-fifty-dollar services for forty-dollar wages.

Perhaps we may think that if we had the ideal board we would do great things, yet if we have not such a board we have no one to blame for it save ourselves; there are such men and women, and we can find and elect them to this most arduous and thankless task; but unless we give them intelligent co-operation after we place them there, unless we grant them the right to act as free moral agents, unless we are willing to be generous in the financial support we give the schools, unless we are willing to meet the teachers' advances half way, unless we feel that while our children may be taught, they never can be educated without our active and energetic aid—unless we can realize that the public-school system does not lift the burden of personal responsibility, the best board that ever was heard of will find its labors end in vanity and vexation of spirit.

It should be remembered that members of school boards belong to the class of officials serving without remuneration and that especial loyalty and gratitude are due to those who unselfishly and earnestly seek to manage affairs wholly for the welfare of the schools. And it should not be forgotten that because this is an unpaid office, dishonesty and greed are an especial menace when found there.

The ideal school board should be composed of ideal men and women each of whom should have a hobby and that hobby should be the development of ideal children. To this end the ideal member of the school board should be a business man, a teacher, a doctor, a mechanic, a lawyer, a playground enthusiast, and he should have his finger, in loving and discretionary sympathy, on the pulse beat of every phase of child life.

A woman on the school board ought to be regarded as a matter of course and of necessity. Not, dear sister, because she is a woman; the worst mistake women make is in clamoring for recognition, not really of themselves as indi-

viduals, or the things they stand for, but merely of their sex. In so doing, they are accentuating the old idea that women were a separate and inferior class. And when they persist in "demanding recognition as *women*" for places requiring administrative ability and those qualities of mind which mark the efficient public servant, they themselves are perpetuating the class idea. Recognition of administrative capacity and fitness for public office as individuals, not as women, is the only recognition they have a right to ask in the citizenship of the world which they are striving to attain. When a woman is elected to membership on a school board, it should not be because she is a woman or even because she is a mother or a daughter, but it should be because she is known to be possessed of those personal characteristics which would make her valuable as a member.

Women should be equally eligible with men to election on school boards because they, at least equally with men, are interested in that class for whom schools are maintained—the children—and must also help support the schools, and because among women are many individuals who possess those qualifications which would make them suitable members of the ideal board. A woman who is a nonentity, or who has no convictions of her own or is not well balanced, will be of no value on a school board. If we must have vapidness, inefficiency, or selfishness, let it be of the masculine gender. Place women on your boards, but put them there because their presence means additional strength.

In working for the ideal board no one should be selected who has not a single-hearted devotion to the cause of education. No one should be chosen simply because it will be easy to elect him, or because he will catch the Republican or the Democratic or the Jewish or the Catholic or the Swedish vote. No one should be elected who believes that he was born to set the world right, and regards it as a cursed spite. Finally, no one should be considered as a candidate who has not the spirit of St. Lawrence—willing to be roasted on both sides for conscience' sake. And having found our St. Lawrence, let us not keep him forever upon the gridiron of our criticism.

DISCUSSION

MRS. SARAH S. PLATT DECKER, member of Educational Council, Colorado Teacher's Association, Denver, Colo.—The issue that I shall take with the first speaker is in her position that "if a business board sees its whole duty and does it, there will not be much cause for complaint." From my observation there is not a city nor a community nor an individual compassed by this great National Education Association which has witnessed and realized an ideal school board with this composition. Doubtless in the formative period of our educational system, it was the only practical solution for the conduct of what was then a most limited and circumscribed condition. But with the growth, the liberty, the enlightenment, have come the weighty problems which demand that we give up this inherited tradition, and constitute our boards of education in conformity with the tremendous issues involved.

The business board, however, has lingered—has died hard, in fact. I regret to say that we have not yet been invited to its funeral. But it can never have a resurrection in the minds of the people, even tho the politicians are always alert for its restoration. Why not a

"business" board for the care of the city schools? Let us see. There are three elements which enter into this great and important obligation.

First and above all else, the city's children; therefore, we should have mothers and fathers upon the school board. Think for a moment what would be the effect if tomorrow an edict were issued, taking all children between the ages of seven and sixteen years of age away from the home and entrusting them to the care of strangers! I need not tell you that there would be a revolution, instant and not bloodless; and yet that is the absolute plan when you elect a business board to have the oversight of your children, because you wholly sever the connection between the home and the school. The child goes to an untried teacher; the latter, in place of being under the supervision of those who will strive for a systematic and harmonious continuation of the home training and ideals, is too frequently governed by a board whose fetish is dollars and cents, and who regard both pupil and teacher as the smallest of their concerns.

The second element which is to be considered in a board of education is the teaching force; therefore we must place trained educators in the body for their interests.

Last and least of all, the commercial concerns may be considered. What are these much-heralded business interests? Mostly building schoolhouses with a fine bank account, provided by the taxpayers, to draw from. Not so difficult a problem, and quite within the grasp of the ordinary citizen, woman or man. The obstacle to progress in educational, sociological, philanthropic, and many other nation-building lines, is the inherited idea that only the commercial side is of importance.

As an illustration of the usual board appointed by the usual governor or mayor or elected by the usual people at the bidding of the usual party power, we give the instance of a certain board of commissioners, having in charge a hospital for the insane. The conditions of the institution were so terrible that an investigation was ordered by the governor. The board of commissioners—"business" men, so called—seemed much perturbed, as the testimony brought forth the neglect, abuse, and even criminal conduct of the hospital. Suddenly the governor turned to the commissioners and angrily demanded, "Why have you not remedied this? You have weekly meetings of your board; what have you done at these sessions that these conditions are unknown to you?" The chairman hesitated and hemmed, and finally acknowledged, "Well, I don't know; I guess we generally audit the bills." Do you know why in every state in the Union, from teachers, parents, preachers, student-leaders, and the world at large, there is a demand for a regeneration in the school system? Do you know why such a statement as that made by the speaker of the day—that more than 25 per cent. of the grade pupils are ineligible for promotion—is possible? Do you know why such words are possible as those uttered in the council by a prominent educator—those words which found an echo in the mind and heart of every thinking citizen?—"During the past year the chorus of dissatisfaction with the results of our educational system, from the lay world, as well as from members of our own profession, has grown louder and louder." Do you know why this condition exists, and, not being a new situation, is apparently without hope of remedy? I will tell you. Because the average school board has been made up of business men, who have simply "audited the bills."

No, the regeneration cannot come thru the teacher himself, because he is fettered by the problem of daily living, and too often by the old traditions and narrow groove; it cannot come thru the pupil, who is helpless under prescribed conditions. It must come thru the mothers and fathers, the citizens, who must enforce their demand by the election of proper boards of education. My hope is that the creation of this department in the National Education Association is the breaking of the day, because we are the first lay-members ever admitted as a part of the great body. It is our privilege and obligation to begin a training school for ideal boards of education, which shall be composed of high-minded, unselfish women and men, who will believe that the commercial side of the work is the least of all, and whose purpose will be to fulfill the tremendous and glorious task intrusted to them—the building of a nation's people.

DELINQUENCY AND THE RESPONSIBILITY OF THE SCHOOL TOWARD IT

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The greatest of all problems in modern education is the problem of elementary education in the great cities of our country. The secondary school presents no such problem in any of its phases, while the elementary school in the small city or rural community is simple in its solution when compared with the great problem of the education of the masses in the congested districts of our great cities. And of the many phases of this problem, the adaptation of the school to the life of the child and the harmonizing of the one to the other in such a way as to secure the greatest benefits to the child are the most serious to be considered. It is this lack of ability so to adjust the school as exactly to meet the requirements of the growing boy that is in a large degree responsible for delinquency. For the causes which tend toward delinquency, however, we must look to the home and other influencing conditions in the child's life.

A serious effort to collect statistics bearing on the causes of delinquency has been but partially successful. The difficulty lies in the inability to secure the history of each case, and to ascribe to each influencing condition its proper share of the cause. Sufficient data have been gathered, however, to ascribe pretty definitely the majority of cases of juvenile delinquency to one or more of three general causes. It is difficult to give the exact bearing of each of these causes on any particular case, but it is comparatively easy to trace most cases to one or more of these causes, and, generally speaking, each of the three contributes in a greater or less degree to the offense.

The three primary causes of delinquency are heredity, environment, and association. The last two named are largely dependent on the first, and the three are so closely related as to make it difficult to separate them and to assign to each its responsibility in any particular case.

To the cause of heredity may be traced a large percentage of cases of delinquency found in our foreign population. Heredity is largely responsible for the settlement of certain classes of emigrants in the congested districts of cities. And it is among this class that the greatest number of cases of delinquency are found. Heredity is also responsible to a great degree for the personal habits of children which tend to cause delinquency. Then again, physical deficiencies and mental sluggishness, both of which are directly responsible in many instances, are in the majority of cases directly traceable to heredity. Racial traits, both physical and mental, are very persistent. The delinquent inherits from his ancestors defects of both body and mind which tend to disqualify him from the observance of both natural and legal laws. These defects must be overcome by both physical and mental training, and to the school belongs the Herculean task. Hereditary tendencies either uphold the child, protecting

him against the evil with which he comes in contact, or plunge him deeper than his fellows until he awakens in the hands of the controlling power of the school or court. Theodore Roosevelt, in an address before the Young Men's Christian Association, touched upon this vital point. "The truth is that each one of us has in him certain passions and instincts, which, if they gain the upper hand in his soul, would mean that the wild beast had come uppermost in him." Had he pursued this subject farther he would have found that, lying side by side with these dormant tendencies toward evil, were just as strong tendencies toward good, which if cultivated and given the opportunity to grow would produce qualities which develop and strengthen manhood. And for these and other reasons we must consider heredity as one of the dominant causes of delinquency, and in our efforts to overcome it we must act accordingly.

In considering the two remaining causes already stated we will find it difficult to separate them at all times. Neither exists without the other in some way exerting an influence. Environment probably is the stronger of the two, in a great degree contributing to the association. Home conditions must reflect largely on the child's life. Poverty, neglect, parental indifference, ignorance, and even vice and crime are found in the majority of cases brought into our juvenile courts. Lack of parental control, either thru weakness or ignorance on the part of the parent, has much to do with child delinquency. Recently it has dawned on our juvenile courts that perhaps the parent was in a large way responsible for the sins of his child and, beginning with the correction of the parent, they have found it unnecessary to punish the child. But such home conditions as poverty, illness, congestion of family quarters, poor ventilation, poor food, and a host of similar ills cannot be banished by an order of the court. And there can be no doubt that these are contributing, if not direct, causes in a vast majority of cases that come before the authorities. In education alone can we hope for an improvement along this line. In the home where little regard is paid to the common habits usually conformed to by the majority of citizens, in the home where there is no prescribed time for arising or retiring, where little attention is paid to the gathering at the family table, where few or no responsibilities are felt by either the parent or the child, where the home life is reduced to the primitive life of the savage, little can be done but await the education of the next generation. And sad as it may be, it is nevertheless true that in the majority of these cases the child at an early age leaves the home and seeks refuge in the home of the stranger where the ordinary customs of the family are observed. We find hundreds of young men and women desert the parental roof to board in the cheap boarding-house or the home of a friend, and all because of the recognized lack of the common home customs. Nor are the parents always entirely responsible for these conditions. Surrounded by an environment which offers no solution or help, with the duties of parenthood thrust upon them at an early age, and ground down by the increasing cares of providing for the home, many lose interest and abandon hope, leading an aimless career, caring only for today with the assurance that somehow

tomorrow will care for itself. Such parents offer no assistance and much hindrance to the growing offspring, and the great wonder is that he turns out as well as he does.

And now as to association. And right here society and government has much to answer for. We must consider those barriers to progress which organized government has permitted to be thrown across the child's pathway which make his progress more difficult. While some effort has been made to improve the conditions in some of our great cities by providing public playgrounds, public baths, public lectures, public reading-rooms, and public outings, little attention has been given to the suppression of private billboards and theatricals, private saloons where even children may catch glimpses into the world of which they should know nothing, private picture shows and, probably worst of all, the public dance-hall. The elimination of the majority of these evils, together with the strict supervision of the remaining few, would do much toward assisting in the general uplifting of our child-life.

Of the personal associates of the child little need be said. The influence of evil association is too well understood to demand more than mention.

And now let us consider the responsibility of the school toward delinquency. That there are cases which cannot be controlled by the school and must depend upon the juvenile court we must admit. But these are small when compared to the number which can be controlled and prevented by proper school conditions. Of punishments and corrective institutions this paper has no concern. It is our duty to discuss and discover, if possible, the remedies lying within our own schools, and advocate the establishment of those remedies wherever needed in our school system.

Inasmuch as whatever there is in the school which tends to oppose the natural growth and inclinations of the boy will also tend to make his school life irksome, and in this way assist in developing any hereditary tendencies toward truancy, we must study the school; and such of its phases as we find not conducive to the natural development of the child must be eliminated, transformed, or so modified as to retain their value from an educational standpoint and yet remain unobjectionable to the natural instincts of the child. Nor must we expect these changes will be radical or revolutionary. Any changes which would be in their nature radical or revolutionary would also be doomed to failure, for where have we a master mind capable of solving a problem so great and evolving a system of educational thought which would meet the needs of our modern civilization? Any change which comes must come as a result of evolution, building upon our present educational system a new system which will retain the good and add such new material as will be found helpful and necessary.

In order to have any well-regulated institution it is necessary to have its foundation deeply laid in the homes of our country. It takes a generation or even more to uproot a custom, no matter whether it be good or evil, and to plant another which will supplant the older, producing better results and with

less expenditure of energy. For this reason we hear of school boards thruout the country constantly reverting to the three R's and pointing with pride to what the older system of education did for them and their parents. But they forget to take into account the different conditions under which the older generations lived and grew into manhood. The school of today must replace much that the home did for the child a quarter of a century ago. With new conditions in the home life of today we find new needs in the school training. Reduce the present school term from ten months to three or four, reduce the number of pupils in a school from a thousand to half a hundred, reduce the number of inhabitants from several thousand to the square mile to a score or less, and assign to each member of the household certain daily tasks that were once known as "chores," and are now almost unknown, and you may well do away with your manual training and household arts of today, your rooms for defective and sub-normal children, and even your steamer rooms of our eastern cities.

In reverting to the life of the past and introducing home duties into the school, we are simply permitting the natural expression of the self-activities of the child, and where we now have the child overburdened with academic work we then had him overburdened with the physical, so much so that we find him turning to the academic for his recreation. We have but to seek the reason for the old-fashioned spelling school, the lyceums in every country schoolhouse, the mathematical knots untangled on long winter evenings by the fireside, and the desire of every family to offer an academic education to at least one member of the household, and we shall recognize the difference between the school of half a century ago and the school of today. In fact, we may have gone too far in our academic work in the school, and it may be one of the needs of the present school curriculum to dignify work and provide a place for the boy or girl who has little inclination to mental activity, and seeks instead the physical work of the manual training and the physical culture of our modern courses of study.

The modern school course of study calls for more than the manual training and household arts. While those studies are probably foremost in importance, and must in no instance be neglected, we must by no means neglect other necessary subjects which will assist in making the school life of the child a perfect whole. His physical life should be carefully looked after. He should be subjected to a careful physical examination by a physician, and not only his school-mates be protected against contagious or infectious disease, but he should be studied for defects which neither he nor his parents are aware exist. Many a case of truancy and delinquency may be traced to defective eyesight, or adenoids, or defective hearing, or nervousness. In New York City it was found that 30 per cent. of the children were in need of glasses, and almost 20 per cent. of the children were afflicted with defective hearing. And in the majority of these cases the parents were unaware of the difficulty until notified by the school authorities. Not alone should the child be examined and the parent notified, but, in case the parent is unable to provide medical attention or is

indifferent to the suffering of his child, the school should furnish the necessary treatment free of all cost and make the treatment, whether medical or surgical, compulsory. Until this is done many of the most necessary cases, especially those tending to cause delinquency, will be permitted to continue, to the detriment of society and the child.

As to the environment, the school may do much to promote a public sentiment which will materially improve the condition of the neighborhood in which it is located. By judicial exercise of its functions many evils may be eradicated which, if left to themselves, may result in harm to the child. Laws which would be dead letters may be enforced. The neighborhood may be kept clean. Public sentiment may be aroused. And a careful watch may be kept over the morals of the neighborhood which will greatly reflect on the child's life.

The school itself should be as far as possible a model as to conditions and surroundings. The rooms should be well lighted, comfortably heated, and models of good taste. Suitable pictures and statuary should adorn the walls. Good books, both text and library, should be within easy access of the children, without red tape and with as little accounting as possible. The child should be encouraged to remain within the school building or grounds after his daily lesson periods are over. He should be given the freedom of the gymnasium and the playground. He should be made to feel that it is his own and not an antagonistic institution for punishment. He should get over the feeling that he is sentenced until he is fourteen years of age to serve so many hours each day in a task which is unpleasant. If it is necessary, both books and clothing should be furnished by the school without publicity or the feeling of poverty.

The course of study should be within the comprehension of the child. It should interest, and where it fails to interest it should be studied and the reason found and the remedy applied. Textbooks should be written to interest and not to puzzle. Teachers should be supplied who are in harmony with their work. The child himself should be studied. He is interesting in himself. Without a proper comprehension of the pupil we cannot hope to meet his needs. Recently a Chicago judge sentenced a boy to read Bryce's *American Commonwealth*. Small wonder the boy ran away. The judge should have studied his problem. He should have realized the task he was setting. Had he asked the boy to have made for him a table or a chair the result might have been different.

Nor should the school lose sight of the entertainment and the value from an educational standpoint of the stereopticon. We are at present passing thru the greatest educational movement in the moving-picture show that has passed over our country since the great debates of two generations ago. The world has been ransacked by daring men with the moving-picture machine, and we are shown exact reproductions of living action in parts of the world so remote that none but the most daring could hope to witness the scenes enacted. But we are also given pictures so detrimental to the morals of the growing youth that they should be suppressed, and in many cities this is done, but not to the extent it should be. Why not make use of these aids to education, and not worry

because the child is getting some of his knowledge sugar-coated. Even the phonograph can be used to a great advantage in our public schools and the greatest of orators and musicians brought before our children. And who will deny that they will enjoy or improve thereby?

The object of all education is good citizenship. The school that fails to turn out the highest type of citizen fails in its function, no matter what its other virtues may be. The school that solves the problem of good citizenship has solved the problem of delinquency.

DISCUSSION

CHARLES O. MERICA, president of University of Wyoming, Laramie, Wyo:—Three principal points of the paper will be noted for discussion: first, the school as a neighborhood center; second, the employment of teachers in sympathy with childhood life; third, the creation of courses of study suited to the needs and tastes of individual children. Limited space and time in this discussion forbid citation of definite investigation upon any of these points. It will be necessary to confine the discussion to opinions based upon such investigation.

The school as a neighborhood center does offer opportunity for creating better standards of living both in the matter of material things such as clothing, food, housing, etc., and in the matter of intellectual tastes and pursuits. In the larger cities some profitable work has been done along this line. Little such work, however, can be done in the smaller cities and villages thruout the country. There is no subject upon which people are so sensitive as upon that of receiving public aid, and sometimes the greater the degree of squalor and shiftlessness the greater the pride upon this subject. This phase of the subject is so mixed up with general charity work as to seem to remove it largely from the present sphere of the school. Along intellectual lines teachers are doing much, and they should be urged to do much more in the way of setting a better standard. Literary societies, traveling libraries, including art exhibits, etc., can be greatly multiplied.

Upon the proposition that the teacher should be in sympathy with the children it seems futile to say anything. Teachers of grades covering the years of delinquency are generally girls. It may be brutal frankness to say so, but most of these girls do not expect to teach school very long. It is therefore difficult to create a professional interest on the part of the teacher. We have studied school management largely from the standpoint of the teacher and the school. Perhaps a remedy would be to study school management from the children's standpoint. Why look for defects in the school in the conduct of the children when the children are of course the untrained and the untaught and the weak? It is not their fault that they have to be in school. Most of them would gladly absent themselves. That they are there at all is the teacher's opportunity and ought to be her gratification. Given a teacher concerned comparatively little about the school system and the discipline and order incident to the system, and concerned much about the individual child, and this problem would largely be solved. The best school is not that one so well organized that the teacher might leave it for hours and days and it would continue to run like a clock. The best school is the school in which the individual demand of each member is so insistent that the teacher cannot be spared a single minute. If the grades of the schools could be taught by people interested sufficiently professionally to study each individual boy and girl, and then to become themselves so interested in each boy and girl that they would say every hour, "The best powers in me I will give to make one boy a man," the percentage of delinquency would be distinctly decreased.

As for the third point, school teachers have often lost sight of the source of interest in school work. They complain that children are not interested in their studies. This

complaint is apparently based upon the assumption that a child should come to school already equipped with the element called interest. I insist that this expectation is groundless and unscientific. Just for their own sakes there is no very definite reason why grammar, arithmetic, and geography should be attractive to a child, and particularly to a boy. They are at least not in the same class with fishing, swimming, coasting, and seeing the show. There are two reasons, perhaps, why any subject should be studied in school. One is that it directly concerns one's life; and the other that it is a tool necessary to the comprehension of some other life-touching subject. There is no reason why a child should learn any particular subject just because somebody thinks he ought to. He should learn the subject because of this life-relationship, and as far as possible should be made acquainted with the relationship. I do not believe it is necessary greatly to change the course of study; but it is essential to emphasize, at least in spirit and method, this life-touching quality of subjects studied.

MRS. ALICE H. HINMAN, vice-president of Board of Education, Lincoln, Nebr.—That we have a live issue before us is evident from the number of addresses upon this one topic in the program of this convention. The very able presentation to which we have listened this afternoon is the fifth address, and each address has been followed by several discussions. I should not attempt to contribute anything to the sum of all this wisdom from the experts, even if I could. But it is our part in this department to contribute a "point of view." We represent the interests of the general public, voiced thru the national organizations of women most effectively and inclusively devoted to the interests of education. The official connection of these organizations with the National Education Association marks, we trust, a new era of a more intelligent co-operation between the general public and the profession, the taxpayer and the teacher.

What, then, is the peculiar function of our department in the attack of our entire social organism upon this problem of provision for the delinquent and defective child? This is the question I want to answer in the few minutes allowed me.

Let me assume at the outset that we ourselves are acquainted with the problem to some extent; that we know the need, and know something of how that need is being met in Boston, New York, Baltimore, St. Louis, etc. With this information in hand and the best interests of our public at heart, we must be the great advertising agency, educating public opinion and arousing public activity. What we have done for pure-food laws, child labor, and juvenile-court legislation, we may do here for the delinquent and defective children. And because we are now more experienced, and better organized, we may do it all the more skillfully and more swiftly.

To inform and persuade our fellow-citizens we must have certain practical suggestions to offer directly to each community thruout the country.

First, let the *purpose* of the special provision for the delinquent and defective children be widely known and clearly stated. As I understand that purpose it is twofold; but our *foremost* object is to free the work of the ordinary graded school from its heaviest incumbences. The machinery has been clogged by these difficult and incomprehensible cases. They have taken much of the teacher's time and her hardest effort. Such children have to repeat their grades three and even four times. If a teacher must give at least twice as much time and effort to a defective as to an ordinary child, and repeats this for three or four years, then this one child has taken what would have carried six or eight normal children thru that grade.

In another way also the defective and delinquent children clog the school work. Every teacher knows that one or two cases in a room will sometimes affect the entire room. Inattention, apathy, restlessness, meanness, have their influence on the other pupils. There is a malarial condition in the room. The teacher is unable to cure the source of contagion, and must keep up an active campaign of antidote and of general sanitation.

And so with reference to this first important point of our purpose, let us publish it

far and wide thru our communities that the defective and delinquent children, forced into our schools by a compulsory-education law, are a terrible incubus there, both on account of all they demand directly from the teacher, and also on account of their effect upon the other children. In its *own interests* the public school must make some special provision for them.

The secondary purpose we may boldly admit to be the salvation of the delinquent child. And here again we will confine ourselves to the lower motives, if you choose, and, setting aside any statement of the child's right to a fair start in life, we may refer only to the fact that special provision for these children is a saving of public money. For from these defectives, discouraged or made ugly by their failures, the ranks of the criminals and the paupers are filled. The unfit either sink into helplessness, or they enter the ranks of the powers that prey. They will cost the state far more in the end than it would cost to prepare them in childhood, thru special schools, for happy and useful living. It costs, for instance, in St. Louis, \$130 per year per child for the redemption of child lives in the special schools of that city.

When we have convinced our communities of the practical value of our purpose, we must give them some clear and simple information of our method of procedure. "What are you after?" "How are you going to do it?" If we can answer these two questions definitely and forcibly, we can probably carry our public with us.

A study of the methods already in use in the most successful special schools reveals the necessity for these steps: First, the principal in each building must examine carefully each difficult case, and co-operate with the teacher and parent in securing the fullest possible information on the life-history of the child. Then medical aid must be called in, and the physical ills—adenoids, partial vision or hearing, malnutrition, etc.—be corrected as far as possible. Many cases are set right in a few weeks by the co-operation of principal, teacher, parent, and physician. But there are cases that are hopeless from the point of view of the ordinary teacher. She is not equal to the problem, and she cannot provide the necessary conditions. For these so-called hopeless cases the special school must be opened. Here we must place our most expert teachers. If possible let each teacher have no more than fifteen in her care. The greater part of the time will be given to physical training and to manual and industrial training. In New York City two-fifths of the time is given to the bookwork, and in some special schools even less time. The child begins to learn at his own pace. When he gains the power to study properly, he is returned (often reluctantly on his part) to his own graded school. Other cases never able to return are carried along until trained to some trade, taught how to live with others, and inspired with that self-confidence necessary to even a humble degree of success. Friendly relations with others, confidence in themselves, the power to do a useful thing—these are what save them from turning into paupers or criminals.

It is well known that the home conditions are at fault in the majority of cases where a child is delinquent or defective. The teachers of the special schools co-operate as closely as possible with every agency that can influence the parents for good. Like other teachers they work in close touch with the juvenile court. They enter the homes directly in the friendliest possible way. They touch the parents thru neighborhood clubs, church societies, or any other influence that may bring the parents to do the best they can for this child. Sometimes, of course, the children have no parents or guardians, or worse than none. Then the special school, under the direction of the superintendent of schools, sets in motion the necessary legal machinery to free the child, and then places him in proper care.

Take it all in all, the work of the schools for delinquent and defective children is a most beautiful and Christlike work. We may confine our discussions of it to the dollars-and-cents aspect, and make very clear to the taxpayer its economic value. But it is well also to lift our eyes to the full meaning of the work. Every true educator is an idealist, who knows that "man doth not live by bread alone," and every live educator feels keenly the worth of saving these backward and thwarted young lives.

In conclusion, then, let me hark back to the main points to be made *now* upon this great topic:

First, that the National Education Association in general, and this department very particularly, must be a great committee for agitating this subject, informing the public and persuading it to take the first steps, at least, in providing for the delinquent and defective children. Second, that well-planned medical inspection be provided in every community. Third, that the best available teachers be secured for special rooms, where the defective child may be known, may be lovingly nurtured and trained, until he is able to be a self-sustaining unit in his community. Let him stand where he may catch a little of the sunlight, and in the light and joy and strength of it find his hands free, his mind clear, and his heart true, to do well his own little task in life.

STUDY AT HOME

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In considering this topic, I think of several problems worthy of our attention, and when I have proposed a few, one or more may be elaborated at your pleasure.

Shall we first get our setting? And will you consider with me the general field of study, of which home study is only one phase? All I say of the larger topic of study we can readily apply to the more limited phase of study in the home.

Older views of education emphasized form instead of content, put symbols above realities, made memory more prominent than original thinking, and stated the aim of the educative process as future efficiency for which one must prepare by making the immediate tasks mechanical and formal. Under these circumstances, home study, consisting largely of mechanical memory tasks, was easily assigned; parents found it pleasant to hear the spelling lessons, the verbatim recitation of text, or the dates in history; and, best (?) of all, both teachers and parents could quickly test the amount of acquisition.

With the gradual change in the place of emphasis in the educative process, or the recognition of content as more valuable than symbol, of spirit as more vital than form, we have said that what we care for at the end of a child's schooling—and all along as well, believing that future efficiency is best built on everyday efficiency—is not the mere mastery of certain chosen facts, but *is*: (1) independence in thinking; and (2) control of one's habits so he can think at will—i. e., use his energies most economically in solving life's problems. Since, however, this power of thinking and of concentrating attention at will can only come from practice—practice in voluntary concentrated attention in solving worth-while problems, the method of doing which has become, under the teacher's guidance, a conscious process to the child—we teachers—with parents to help us—still find the selection of elementary-school subject-matter a great problem.

As teachers have recognized the "content" aim of education, methods of teaching have materially improved, but methods of studying have not kept

pace. Some of you may know Hinsdale's *Art of Study*, and Noah Porter's *Reading and How to Read*, but you may not know that Dr. Frank McMurry, of Teachers College, New York, has devoted several years to this vital question and will soon have a book published that teachers and mothers will certainly welcome. In the meantime, one gets a hint of the feast on p. 102 of the 1905 National Education Association report; Dr. McMurry has, besides, freely given his ideas to his students, several of whom have already published helpful articles in this field. I refer to (1) Earhart's *Study in the Elementary School*, Teachers College Contributions to Education, (2) Strayer's articles in the *Atlantic Educational Journal*, April and May, 1909, and (3) the 1908 Report of the Minnesota Educational Association, Elementary Section.

When the study-process of good students is analyzed, it is found that some or all of the following factors are operative:

1. *Having an aim*; knowing the problem, finding the question or the point of weakness that needs strengthening. Or, if it be a bit of reading, searching for the big, binding, or central thought.

2. *Selecting material for the problem's solution*, after it is before one, by recognizing what is known, what is not known, what is necessary to find out, what the strategic positions are; by judging of relative values, sifting out the less important details; by learning where to go for material, how to use books when searching for evidence (value of indices, outlines of chapters, prefaces, etc.); how to keep notes and how to keep record of information once found so it is readily accessible if needed for proof later.

3. *Testing the validity of the information*, when the solution seems found; holding tentative judgments; supplementing the text as well as one's own thought; being broad or open-minded so as to recognize flaws or defects, and appreciate a good point made by an opponent.

4. From all this grows the power of *reflecting*, thinking, abstracting, generalizing, organizing, forming judgments, holding opinions—ending in *philosophizing*. In other words, one exercises initiative, grows independent in thought, not necessarily different from all others, but honest with one's self.

5. And then comes the final test of worth, when *execution* is attempted. How do we know when we have learned a lesson—in school or in life? By our ability to express the result; and expression may be in scores of ways: a bit of housework, a picture, a clay horse, a doll's barn, a smile on the face, or a song on the lips.

Real study ends with the above-named factors, but life proves that it is often of economic value to know some things so well that there is no need to study or think. In such cases *memorizing*, tho a true by-product of good thinking, may yet need special attention.

And now, since time presses, let us hasten to our more specific problem on which our friend from Texas says she can talk all day—"Home Study." If we believe in the rationality of the preceding statements, it is evident that

in making assignments for home and seat work, the teacher's task is much more difficult than formerly. No longer can the child put a bookmark or pencil check in the text to show just what must be committed to memory. Instead, if he is not yet able to concentrate, to think clearly, to carry the main points in mind, he probably has the vaguest of notions concerning what is required, and frets both himself and parents until bedtime. This sort of thing causes parents to feel that methods have changed, and, whether opposing or agreeing with the change, they find it hard to assist in the lessons, and consequently are beginning to ask for longer school hours where study is done in the school workshop. At any rate, they want no home study. Some men argue that when business hours are over, business should close, and school is the child's business. Other parents feel that unless they keep in touch with their children's lessons they lose one opportunity for close sympathy and vital contact with their children. Some, too, depend upon their children's schooling for their own broadening, having had in their youth fewer advantages than they thankfully give their children. Thus we see just cause for a radical difference of opinion about home study. Yet another factor enters—our modern civilization makes home conditions less conducive to concentrated thinking than formerly. The family circle is too often broken by attendance of parents upon business, club, or social functions, or *work*, in less well-to-do families. The spirit of such a family party as Whittier describes in "Snow Bound" is gone forever. Would that our children could live in such an atmosphere of restfulness, content, broadening influences, and real education in independent thinking! What have we in its place? The amusements we have just been discussing. To make quiet home study even more difficult, we find children of certain "social sets" having French, German, and dancing lessons, besides music, and, possibly, "art."

It really is not my province to answer the problems you see growing out of this talk, but because you request it, I will say that I think it our bounden duty to teach children how to study, and this teaching should be by first guiding them in pleasant work; then making them conscious of the process they are employing; noting its value and economy; third, arousing the will to do and to persist whenever desired; and fourth, selecting worthy subject-matter to give practice in the different fields—especially in concentration, persistence, and independent thinking. Home study fitted to advance this plan would in no way be detrimental to a child, nor would it tax a parent unduly.

In conclusion, permit me to give a hasty review of my points and a statement of some problems open to us for thought and discussion:

1. The older view of the aim of education emphasized form over content. Assignments were then easily made, easily looked after by parents, and easily tested.

2. With power the aim, rather than facts, methods of teaching changed radically, but methods of studying are still poor.

3. Hence we must teach children how to study, if we secure the independence, concentration, organization, and persistence we desire.

4. The numerous factors in good study cannot all be taught in any one grade, in any one subject, or in any one school year, but the earlier we begin to demand independent thinking the sooner we shall get it and the fewer mechanical assignments can we make for home study.

5. The farther away from the formal requirements we get, the harder it is for the parent to direct and test the child's work unless he is in close touch with the teacher's plans.

6. Many conditions of our modern complex life cause a wide difference of opinion, hence our questions:

a) Is studying more than mere memorizing? If so, what shall be the place of memorizing in the study scheme? How much shall mechanical memory of facts be the test of whether one thinks or not? That is, in other words, shall the old form of examination or test questions continue to prevail? Do they produce undue nervous strain in pupils?

b) Is it worth while to make all children approach this ideal method of study?

c) Should children learn to express and substantiate their own opinions or should these opinions be summarily suppressed instead of put to a test?

d) Can studying better be done in laboratory or schoolroom than at home?

e) Should children do any home study or should they drop work at school close?

f) If home study is done, should it be more or less than now? And when—morning, afternoon, or evening? (Certainly the children get none too much sunshine as it is, and, unless we can have out-of-door schools, dare we shut them in any more than at present?) Again, what amount of extra work shall be demanded of different ages?

g) If done satisfactorily, must not parents understand the *aim* of all assignments, and agree with the teacher as to the factors in study on which the child at a given time needs most help?

h) What are the relative values of school subjects and parts of subjects in aiding good studying? What changes and, especially, what eliminations shall we make in our crowded curricula to further this view-point?

THE PARENTS' OBLIGATION TO THE SCHOOL

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My subject today is the obligation of the parent to the school. If it seems, in the few words that I shall say, that I give undue weight to the responsibility resting upon parents and homes, leaving too little for the school, the teacher, and the community, please remember the limitations of my subject.

Surely the first obligation of the parent to the school is to *know* the school.

The most direct way to this end is thru friendship with the teacher. Visits to the school made only when "something is the matter" will never draw the parent and teacher together in mutual respect and sympathy; nor does the plan of a certain distressed mother commend itself: The school year was drawing to a close when she discovered that her daughter was facing a failure to "pass." She gave an elaborate luncheon party, where the teachers formed the group of uncomfortable guests, and the anxious mother sought at the eleventh hour to atone for the year's indifference. Probably she had no thought of bringing undue influence to bear upon the marking system, yet to these teachers it seemed little less.

There should be visits to the school and an evident interest in the progress of the work all thru the year. An intimation that the parent has a glimmering of some of the trials of the teacher and appreciates her efforts will do no harm even to the most hardened pedagog.

The right sort of acquaintance with the teacher was expressed by the mother who said to me after she had been president for two months of one of our mothers' circles: "Won't you please come to our next meeting? I want you to know our principal." "I do know her; I met her the day you organized. Is it anything special?" I replied. "Oh, no, only she's such a fine woman. Why, of course, I knew her, or I thought I did. I've had children in her school for years; but I had not the least idea how she really felt about things till we began our work together. She is a grand woman. She knows all about the children, hundreds of them, and she's willing to take such a lot of trouble! I want you to know about her."

Ah, how true it is that we underestimate people when we "don't know how they really feel about things." Perhaps if we knew in what spirit most teachers live and work, we would be able to overlook an occasional mistake. We are not infallible as mothers, and we have the advantage of making our slips and blunders in the privacy of home. What must it be like to have forty or fifty pairs of keen eyes watching one all day long, and to know, beyond peradventure, we are to be reported and quoted—often misquoted—in as many homes before bedtime?

In some schools there are parents' meetings early in the fall for the purpose of giving all the teachers a chance to explain the studies to be taken up during the year, the method of procedure, the value of the subjects, and the psychological reasons why they occur at this point in the child's life. You can readily see that when Johnny comes home with the remark that he hates arithmetic and sees no value whatever in language work, there is someone there who is able to tell him that these studies become very interesting a little later in the term, and why he couldn't get along by and by without what seems dry and hard now. Incidentally the child's respect for a mother who knows the teacher's aims is vastly increased.

No parent should trust for his understanding of the rules of discipline of the school to the fragmentary accounts and the childish interpretation of the

pupil. The teachers will give us all the laws and the penalties in a clear statement that we may be in a position to see that our children are true to their obligations to the school. It would be no small service to both child and teacher, if the parent at the outset could convince the child that the school exists to enrich his life, and that the teacher is his good friend always.

It does not take a very wise person to observe that appreciation and encouragement accomplish more in bringing our wishes to pass than fault-finding and condemnation. So parents who approach the school without a sincere consciousness of its great value and its many fine points will have no influence to improve it. We must agree that the last word as to schools has not yet been said, but we have only to look back a few years to have courage for the future.

Teachers are not archangels, being made of the same material as parents, but we could hardly do our children a greater injustice than that of condemning or criticizing the teacher in the child's presence. This seems too obvious to mention, but the mistake is not obsolete.

A word as to the proper attitude of a person who has a vague sense of dissatisfaction. What a blessing it would be if, in that case, instead of mentioning it to other parents, we had the courage to consult with the principal directly. We have all known cases where unnecessary wrath was engendered, where entirely unfounded suspicions grew to the proportions of a tempest beyond the dimensions of the teapot.

The principal or teacher who does not receive a troubled parent with sympathy and cordiality and undertake at once to investigate is rare indeed.

Parents who imagine that the intercourse of the schoolroom alone is sufficient to satisfy the social interests of their boys and girls are mistaken. They need much activity, sport, and recreation together outside of school. But it should all be planned in accordance with the laws of their normal, wholesome development. If we could only keep children's pleasures at the very simplest that they could enjoy at each age, how much sweeter life would be for them and for us!

The amazing spectacle of hundreds of school children spending weeks in the busiest part of the school year preparing for a mammoth theatrical performance for the benefit of an orphan's home is an instance of robbing Peter to pay Paul, which must cause the devil to smile.

The high-school boy, in order to enjoy the company of the girls of his class, finds himself involved in expenditures for flowers, carriages, and tickets which might stagger the young man on a good salary. It is quite time now for parents to use all the intelligence, good sense, and sympathy at their command to understand and settle these questions. It would be to our everlasting credit, if we would devote some weeks and months to the careful investigation of the social needs of the schoolboys and schoolgirls of our community. If it is not my boy and your girl who are reduced to meeting on corners and evening promenades on the street for the gratification of innocent craving for companionship, it

is the boy and girl with whom they sit side by side in the schoolroom, and it is your business and mine to help in supplying their needs.

Our teachers must have had some years of preparation, and to this we would like to have them add a continued advancement in special subjects, and a general keeping abreast with the profession. We insist that they shall be well dressed, and, to meet the demands of the schoolroom, they must be *well fed* and *well slept*. How can these requirements be met? Only by relieving our teachers from anxiety and overwork at home. No doubt a few well-informed and thoroly convinced parents in each community could soon convert the other taxpayers to the belief that "it is economy to buy the best in the market" when we engage a teacher. The people who have never dreamed of advancing the salary of the teacher even in proportion to the increasing cost of the necessities of life are often those who boast that they always buy "the best" in every other line. Growing power and capacity should be recognized and rewarded in the teacher, and there is no place in our schools for those who are incompetent or worn out. I leave it to those who follow me in this discussion to express the unanimous approval of teachers' pensions, the sabbatical year, etc.

We look forward to the time when the profession of teaching will be paid somewhat in proportion to the ability and devotion required to excel in it, and know that when that portion of the millennium arrives, more of the higher type of young men and women will be attracted to it for a life-work instead of as now for a mere parenthesis.

Every teacher admits the serious error of assigning too large a class to each teacher, especially in the lower grades, yet it is one which the teacher cannot herself protest against for fear of suggesting her inability to manage and keep order in a crowded room. Let those parents who most appreciate the value of a *real* teacher, and know what individual attention means to the undeveloped mind, never cease to urge a more sensible and truly economical system until we shall see no more than twenty-five children in the care of one teacher.

The nervous strain inevitable in rooms and buildings containing many children is cruel and unnecessary. Perhaps some day a prophet will arise to proclaim an era of small, simple, inexpensive schoolhouses, of which we may have many, and still use most of our money to secure better and better teachers.

Our schools have made such rich provision for our children that it seems to be the tendency to leave more and more to them. Parents have to be reminded that the teacher is not expected to lay the foundation of the moral character, nor, under the present system, to undertake the teaching of sex physiology. While many parents would object to this latter teaching at the school, it is a melancholy fact that few are equal to the task at home, and teachers are often driven by the dangers they see surrounding their pupils to assume a responsibility which should not rest upon them.

It is too much to expect of an ardent Mothers' Congress worker that she should say all this and fail to add finally that the way to do these things and do

them well is to have a parents' association in every school. These associations, even if made up of mothers only, are entirely different from the ordinary clubs of women, in that every mother and teacher is entitled to membership and almost no expense is incurred. The basis of union is not social equality or congeniality, not ambition for mental achievements, nor even philanthropic effort, but in every case an interest in the welfare of the child and a strong desire to fulfil the obligation of the parent to the school. Already the parent-teacher associations under the Congress of Mothers are actively working in thirty-two states and we shall before long see the home and the school in warmest co-operation all over our land.

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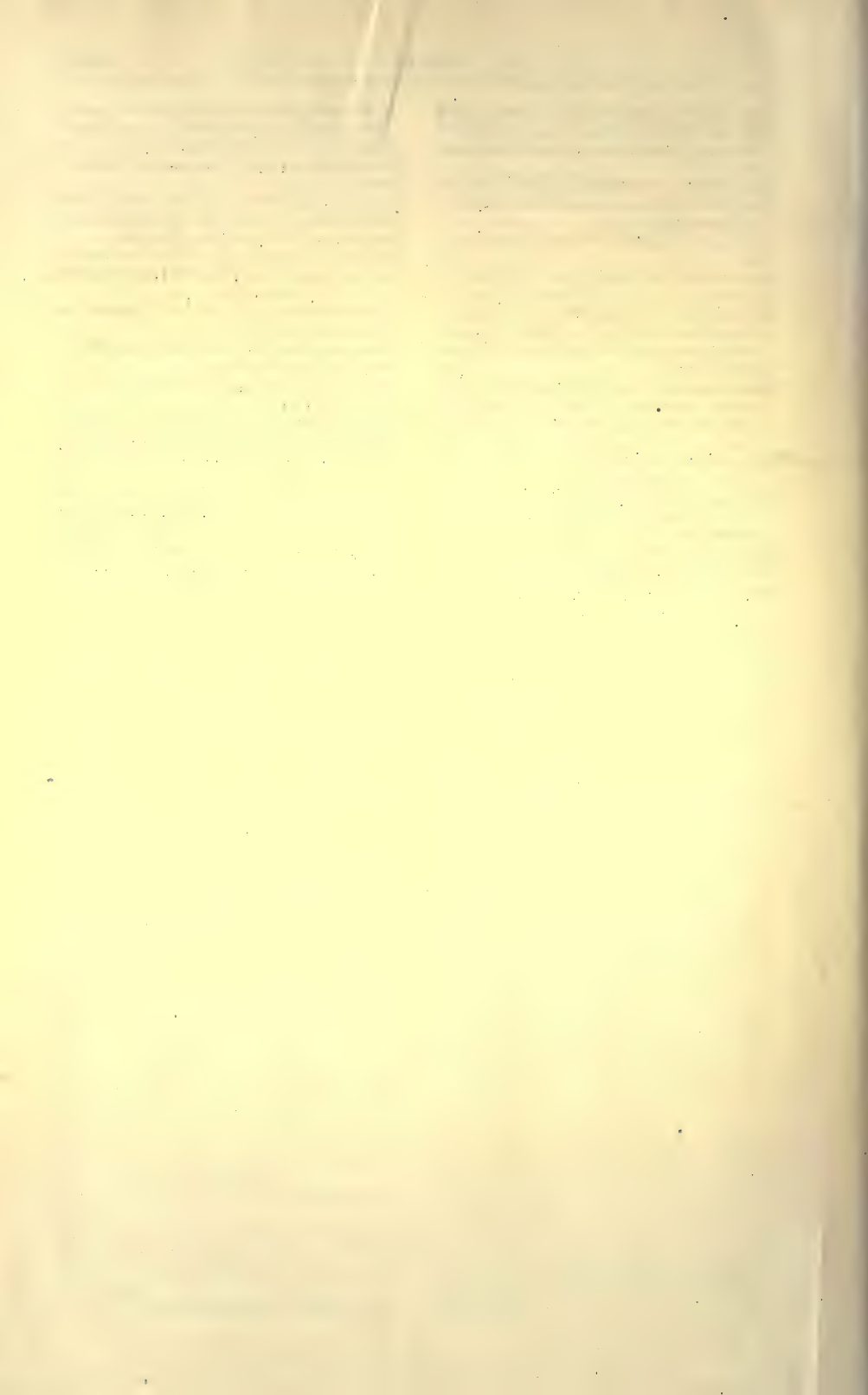
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