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FOREWORD

CHANGE has been a characteristic of human society from the beginning. Racial groups merge, populations shift their geographical environments, new leaders rise to displace the old, ideals are reinterpreted, history is rewritten in conformity with research, recreational pursuits are diversified, and methods of communication are improved. These are but a few indications that the world has never been a static place.

But, altho change itself has been ever present, it has moved with varying speeds and with differing social implications. Today changes come upon us with accelerating rapidity and they affect more quickly the lives of all. Thus we find new and severer strains placed upon the basic institutions of our civilization. Where the home, the government, the church, and the school fail to make adjustments to new conditions, social problems increase in number and intensity.

If we were living in another age, we would probably attribute our social difficulties to supernatural forces and resign ourselves to some unknown fate. But just as mankind has found that many of the once mysterious natural forces can be utilized to increase the happiness and security of the human race, so there has come the hope of controlling society thru education. Social problems have revealed themselves as man-made and therefore not beyond the possibilities of the human mind to understand and to solve.

So within recent years there has been an increase of scientific interest in the problems of society. Skilled students have utilized the technics of science to analyze and to record the nature of social processes. Others have interpreted these facts thru the medium of the forum, the periodical, the book, the newspaper, and the radio. More than ever before, people generally are trying to understand the art of social living. Educators must participate in this renaissance of social thinking and action, particularly as social changes affect education.

The 1932 report of the Committee on Social-Economic Goals of the National Education Association contains this significant statement: "Education needs its own machinery to gather continuously and interpret simply and fearlessly the salient facts of the moving social-economic scene." The need recognized by the Committee is obviously important and equally obviously difficult to meet. This *Research Bulletin* is a venture in the direction of a publication which tries "to interpret simply and fearlessly the salient facts" of the social conditions of today.

J. W. CRABTREE, *Secretary,*
National Education Association

Introduction

Society is changing in many ways. In spite of recent developments in education, the schools still lag behind social change at many points. A multitude of suggestions of varying degrees of specificity and wisdom have been made for bringing the schools more closely in harmony with social purposes and needs. Teachers, both as citizens and as members of their profession, should familiarize themselves with the basic facts concerning these social trends, and should give careful consideration to the various proposals that have been made to improve both social conditions and the educational program.

Nature of Existing Social Data

One does not need to delve very deeply into existing social data to discover a number of generalizations which should be kept in mind in the use of bulletins of this type. Some of these will be discussed briefly in the following paragraphs to emphasize the necessity for cautious and suspended judgment.

1. *Objective social evidence is often unreliable and incomplete*—This fact is apparent in all of the social studies. For example, it is often necessary to rewrite history because of the discovery of previously unknown manuscripts, the excavation of a buried city, or the proof of forgery in an important document. In much the same way the unraveling of the phenomena of American society is hampered by materials of doubtful authenticity and by incomplete records. Even our statistics of population, crime, health, occupations, and other fields make difficult the tracing of trends over decades or centuries. Altho estimates may be used to fill in the gaps, they are seldom entirely satisfactory.

2. *Social change does not always mean universal progress*—It is assumed sometimes that a change invariably means a general social advance. While a change may mean more happiness and security for some people, it may not be a forward step for many others—perhaps not even for a majority. Technological unemployment is a case in point. Are machines and scientific technics advancing at such a rate that people are losing employment more rapidly than they can be absorbed by new occupations? The fact that persons of good judgment and wide

knowledge are ranged on both sides of this question indicates that social changes do not insure progress for many within society. Other trends are similarly debatable because social progress is often uneven.

3. *Various factors in society are woven into an intricate pattern with many mutual influences and common factors*—Because of the limited number of things which the mind can think upon at any one time we try to analyze the factors in a problem under study so as to focus on a few details. This may cause us to become enmeshed in facts, to oversimplify, and to lose the sweep of social processes. We may also become so engrossed in certain details as to overemphasize their relative importance to the total problem. The reality of this danger is obvious in the present bulletin, where it has been necessary in the available space to present only a few outstanding facts. Each section of this bulletin is a "snapshot" when it should be a talking motion picture.

4. *Analysis of social trends emphasizes the instability rather than the stability of social structure*—While it is true that all elements of society are in a state of flux, some elements change so slowly as to be relatively static. The general outlines of basic units such as government and education remain the same for long periods. Hence, it is possible to discuss the stabilizing characteristics of society and to show that all movements have their periods of comparative rest. To present a true picture of society, one needs to discuss both the passive and the active stages. However, for purposes of discussion, there is value in emphasizing unrest and movement, if we clearly understand that these phenomena constitute only one important aspect of the picture.

The Viewpoint and Arrangement of the Bulletin

It is possible to be fairly definite and specific in dealing with the many facts of social change. When, however, one turns to discussions of educational policy in the light of these changes, differences of opinion become evident. These differences result from variant philosophies of education and of the relation of organized

schools to society as a whole. Some believe that the schools should leave controversial issues alone; others urge that an unbiased presentation of both sides of such issues should be offered; still others insist that teachers should not hesitate to urge children to accept opinions in accordance with the teacher's own social viewpoint.

The Research Division obviously cannot interest itself in promoting any one of these various philosophies. The sections on educational implications are intended to raise questions and to suggest points of view more frequently than to advance detailed educational policies with respect to the problems under discussion. The purpose of the bulletin, so far as the treatment of educational implications is concerned, is not primarily to inform or to convince; its purpose is to stimulate thought, to provoke discussion, and to encourage the analysis of social conditions as a basis for modifying educational policies.

The arrangement of the bulletin has been designed to bring the social facts and their possible educational implications to the attention of the reader almost simultaneously. Trends and conditions in each of the larger social areas, such as population, transportation, and economic organization, are presented in a highly condensed statement which is supported by a pictorial chart¹ on the same topic. Immediately thereafter the educational implications of social tendencies in this particular area are discussed. In this manner seventeen areas of social life are discussed in succession. The bulletin concludes with a summary of general educational implications brought out in the various sections.

In each section the basic sources of information are placed in the first footnote. No effort has been made to document each statement of social data because the reader who is interested in details will find the examination of the sources a relatively easy task. The second footnote in each section includes suggested readings in educational publications. A special effort has been made to include books and bulletins which discuss the educational implications of social change.

Important Sources of Information

In the preparation of this publication, particular attention has been paid to the report and monographs of the President's Research Committee on Social Trends. The chief report of the committee, *Recent Social Trends*, has been used in the single volume form.² Page and chapter references apply to both the single and the double volume editions.

It will be obvious that the discussion of social trends herein has frequently depended upon *Recent Social Trends* for facts and citations. This is to be expected, for nowhere else does there exist the same full and careful compilation of social data. To resurvey the original researches would have been uneconomical. The frequent references to *Recent Social Trends* should increase the use of that basic report in teachers' conferences, social studies classes, and other educational groups. Educators already have found the volume of fundamental importance. In fact, because of the requests of the Joint Commission on the Emergency in Education and of other educators, the publishers produced a single volume edition for school use.

Other major sources of data include the published reports of various branches of the federal government. The studies of the Bureau of the Census in the fields of population, manufactures, and crime have been referred to frequently. Use has been made of data collected by the Children's Bureau, the Women's Bureau, the Department of Justice, and the Department of Agriculture. The discussions of educational implications have utilized the publications of the federal Office of Education.

Other important guides in the preparation of this bulletin are listed in the selected references at the end of this introductory statement. While the foregoing sources have been invaluable, the Research Division has availed itself of many other contributions as revealed in the footnotes. To all of these an acknowledgment of appreciation is made with the hope that the present publication will increase their use among educators.

¹ The pictorial charts are designed to present only general trends and conditions. Graphs in this form usually depend upon "round numbers" and are not therefore numerically exact. For detailed statistics consult the references given in the footnotes of each section or, when necessary, communicate with the Research Division.

² President's Research Committee. *Recent Social Trends*. New York: McGraw-Hill Book Co., 1933. 1568 p. Also numerous monographs available from the same publisher setting forth fuller treatments of the topics in the major report.

Acknowledgment of Personal Assistance

This bulletin is an effort to increase the active interest of teachers and of students in studying and improving social conditions. For this reason the Research Division has not hesitated to ask a number of well-known authorities to read the preliminary drafts of the bulletin and to make criticisms and suggestions. However, the Research Division assumes responsibility for this publication in its present form.

Sections were read and criticized by the following: F. W. Burgess, Paul H. Douglas, C. Luther Fry, Meredith B. Givens, Ernest R. Groves, Clarence Heer, Edward R. Johnson, Emory R. Johnson, Frank Lorimer, David J. Saposs, Edwin H. Sutherland, J. F. Steiner, Frederick G. Tryon, Carroll H. Woody, and Mrs. Chase Going Woodhouse.

The pictorial graphs were prepared by the Headquarters Staff of the National Education Association with the assistance of Rudolf Modley, who was an assistant of Dr. Neurath of the Vienna Museum between 1923 and 1930.

How the Bulletin May Be Used

There is a growing interest among groups of teachers in the social and economic problems of today. It is believed that many of these groups will find the present report a useful guide for further study.

This bulletin may be useful in connection with the professional meetings held by principals and superintendents. Usually these conferences devote most of their time to a consideration of administrative and teaching problems in education. The present publication suggests that a number of these professional problems are a part of the social conditions in the community. Broadening the scope of the discussion to include social problems should result in teachers meetings that are professionally and socially more worthwhile.

Students in high schools are showing an increased interest in the study of social conditions. Often classes utilize the community as a labora-

tory for first-hand examination of social problems. That this movement has not spread more rapidly has been due in large part to the inadequacy of instructional materials.¹ Efforts to meet this shortage of materials have been made by city school systems,² educational agencies,³ and other groups.³ The present bulletin will supplement the existing classroom materials. The pictorial graphs suggest the possibility of students making workbooks that are illustrated by cartoons, charts, and diagrams.

Selected References

To supplement this bulletin the following list of some of the fundamental treatments of American civilization and education is included. These publications have been written by authors with divergent social and educational philosophies. Study groups using the present bulletin as a guide will find that the following list contains a wealth of useful supplementary material.

- ADAMS, JAMES T. *Our Business Civilization*. New York: Albert and Charles Boni, 1929. 306 p.
- AMERICAN HISTORICAL ASSOCIATION, COMMISSION ON THE SOCIAL STUDIES. *Conclusions and Recommendations*. New York: Charles Scribner's Sons, 1934. 168 p.
- BAGLEY, WILLIAM C. *Education and Emergent Man*. New York: Thomas Nelson and Sons, 1934. 238 p.
- BEARD, CHARLES A. *America Faces the Future*. Boston: Houghton Mifflin Co., 1932. 416 p.
- BEARD, CHARLES A. *The Nature of the Social Sciences*. Part VII, Report of the Commission on the Social Studies, American Historical Association. New York: Charles Scribner's Sons, 1934. 236 p.
- BEARD, CHARLES A. *A Charter for the Social Sciences*. Part I, Report of the Commission on the Social Studies, American Historical Association. New York: Charles Scribner's Sons, 1932. 122 p.
- BODE, BOYD H. *Modern Educational Theories*. New York: Macmillan Co., 1927. 351 p.
- BRIGGS, THOMAS H. *The Great Investment; Secondary Education in a Democracy*. Cambridge: Harvard University Press, 1930. 143 p.
- BRUNER, HERBERT B. *Some Suggestions for the Study of Modern Problems*. National Crisis Series. New York: Teachers College, Columbia University, 1934. 66 p.
- CHASE, STUART. *Tragedy of Waste*. New York: Macmillan Co., 1927. 296 p.

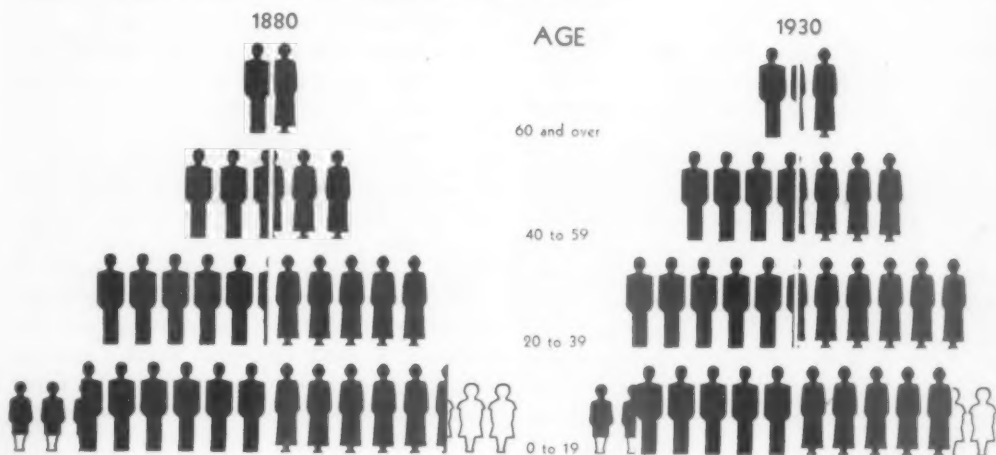
¹ For example: *The Menace of Crime*, Current Problem Series, No. 4, 1932, Public Schools, Pittsburgh, Pa. 12 p.

² For example: *The Story of Writing* (No. 1, 1932, 64 p.), *The Story of Numbers* (No. 2, 1932, 32 p.), *Rules of the Road* (No. 6, 1933, 32 p.); Committee on Materials of Instruction, American Council on Education, Washington, D. C. ¶ *The Changed Scene in Industry and Transportation* (1933, 29 p.), *In Relief of Debtors* (1933, 29 p.), *Unemployment Relief and Public Works* (1933, 29 p.); National Crisis Series, Teachers College, Columbia University, New York, N. Y. ¶ *Less Government or More?* (1933, 22 p.), *Collapse or Cycle?* (1933, 23 p.); Exploring the Times Booklets, American Library Association, Chicago, Ill.

³ For example: *Land Utilization and State Planning*, Unit Study Booklet, No. 19, Modern Problem Series, American Education Press, Columbus, Ohio. ¶ *Regional Planning in the United States* (Series IV, No. 1, 1929, 24 p.), American Civic Association, Inc., Washington, D. C.

- COLUMBIA UNIVERSITY COMMISSION. *Economic Reconstruction*. New York: Columbia University Press, 1934. 250 p.
- COUNTS, GEORGE S. *The American Road to Culture*. New York: John Day Co., 1930. 194 p.
- COUNTS, GEORGE S. *Dare the Schools Build a New Social Order?* New York: John Day Co., 1932. 56 p.
- CUBBERLEY, ELLWOOD P. *Changing Conceptions of Education*. Boston: Houghton Mifflin Co., 1909. 70 p.
- DEWEY, JOHN. *Democracy and Education*. New York: Macmillan Co., 1916. 434 p.
- DEWEY, JOHN. *Sources of a Science of Education*. New York: Liveright, Inc., 1929. 77 p.
- DEWEY, JOHN. *The Way Out of Educational Confusion*. Cambridge: Harvard University Press, 1931. 41 p.
- FRANK, GLENN. *America's Hour of Decision*. New York: McGraw-Hill Book Co., 1934. 263 p.
- HARAP, HENRY. *Economic Life and the Curriculum*. New York: Macmillan Co., 1927. 188 p.
- HARPER, MANLY. *Social Beliefs and Attitudes of American Educators*. Contributions to Education, No. 294. New York: Teachers College, Columbia University, 1927. 91 p.
- HART, J. K. *A Social Interpretation of Education*. New York: Henry Holt & Co., 1929. 458 p.
- HOOVER, HERBERT. *The Challenge to Liberty*. New York: Charles Scribner's Sons, 1934. 212 p.
- JASPERS, KARL. *Man in the Modern Age*. New York: Henry Holt & Co., 1933. 243 p.
- JENNINGS, HERBERT S., and OTHERS. *Suggestions of Modern Science Concerning Education*. New York: Macmillan Co., 1917.
- JUDD, CHARLES H. *Education and Social Progress*. New York: Harcourt, Brace and Co., 1934. 285 p.
- JUDD, CHARLES H. *Problems of Education in the United States*. Recent Social Trends Monograph. New York: McGraw-Hill Book Co., 1933. 214 p.
- KANDEL, ISAAC L. *The Dilemma of Democracy*. Cambridge: Harvard University Press, 1934. 79 p.
- KILPATRICK, WILLIAM H. *Education and the Social Crisis*. New York: Liveright, Inc., 1932. 90 p.
- KILPATRICK, WILLIAM H. *Education for a Changing Civilization*. New York: Macmillan Co., 1926. 143 p.
- KILPATRICK, WILLIAM H.; DEWEY, JOHN; BODE, BOYD H.; and OTHERS. *The Educational Frontier*. New York: D. Appleton-Century Co., 1933. 325 p.
- LIPPMANN, WALTER. *Public Opinion*. New York: Macmillan Co., 1927. 427 p.
- LYND, ROBERT, and LYND, HELEN. *Middletown*. New York: Harcourt, Brace and Co., 1929. 550 p.
- MARTIN, EVERETT D. *The Meaning of a Liberal Education*. New York: W. W. Norton and Co., 1926. 319 p.
- MERRIAM, CHARLES E. *Civic Education in The United States*. Part VI, Report of the Commission on the Social Studies, American Historical Association. New York: Charles Scribner's Sons, 1934. 196 p.
- MORRISON, HENRY C. *The Evolving Common School*. Cambridge: Harvard University Press, 1933. 62 p.
- NATIONAL EDUCATION ASSOCIATION, COMMITTEE ON SOCIAL-ECONOMIC GOALS OF AMERICA. *The Social-Economic Goals of America*. Washington, D. C.: the Association, 1933. 22 p.
- NATIONAL EDUCATION ASSOCIATION, DEPARTMENT OF SUPERINTENDENCE. *Social Change and Education*. Thirteenth Yearbook. Washington, D. C.: the Association. (Available February, 1935, approximately 448 pages.)
- NEWLON, JESSE H. *Educational Administration as Social Policy*. Part VIII, Report of the Commission on the Social Studies, American Historical Association. New York: Charles Scribner's Sons, 1934. 301 p.
- OVERSTREET, HARRY. *We Move in New Directions*. New York: W. W. Norton and Co., 1933. 284 p.
- PAGE, KIRBY, Editor. *Recent Gains in American Civilization*. New York: Harcourt, Brace and Co., 1928. 357 p.
- PRESIDENT'S RESEARCH COMMITTEE ON SOCIAL TRENDS. *Recent Social Trends*. New York: McGraw-Hill Book Co., 1933. 1568 p.
- PROSSER, CHARLES A., and ALLEN, CHARLES R. *Have We Kept the Faith?* New York: Century Co., 1929. 429 p.
- RUGG, HAROLD. *Culture and Education in America*. New York: Harcourt, Brace and Co., 1931. 404 p.
- RUGG, HAROLD. *The Great Technology*. New York: John Day Co., 1933. 308 p.
- RUGG, HAROLD, and KRUEGER, MARVIN. *Social Reconstruction*. New York: John Day Co., 1934. 140 p.
- SNEDDEN, DAVID. *Toward Better Educations*. New York: Teachers College, Columbia University, 1931. 427 p.
- TERPENNING, W. B. *Village and Open Country Neighborhoods*. New York: Century Co., 1931. 493 p.
- THOMAS, NORMAN. *America's Way Out*. New York: Macmillan Co., 1931. 324 p.
- TUGWELL, REXFORD G. *Industry's Coming of Age*. New York: Harcourt, Brace and Co., 1927. 274 p.
- U. S. DEPARTMENT OF THE INTERIOR, OFFICE OF EDUCATION. *The Development of Social Intelligence Through Part-time Education*. Vocational Education Bulletin, No. 173. Washington, D. C.: Government Printing Office, 1934. 67 p.
- U. S. DEPARTMENT OF THE INTERIOR, OFFICE OF EDUCATION. *Vocational Education and Changing Conditions*. Vocational Education Bulletin, No. 174. Washington, D. C.: Government Printing Office. (In press.)
- WALLACE, HENRY A. *New Frontiers*. New York: Reynal & Hitchcock, 1934. 314 p.
- WHITE HOUSE CONFERENCE ON CHILD HEALTH AND PROTECTION. *Addresses and Abstracts of Committee Reports*. New York: Century Co., 1931. 365 p. (Also numerous monographs available from the same publisher.)
- WOELFEL, NORMAN. *Molders of the American Mind*. New York: Columbia University Press, 1933. 304 p.

AGE DISTRIBUTION OF THE POPULATION



Each symbol represents 3 percent of total population

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I. Population ¹

Opinions differ as to the social, economic, and political significance of population changes. Discussion today centers about declining birth rates, restriction of immigration, geographical distribution of people, racial fusion, and other population problems with various economic and social implications.

Growth

The population of the United States has been characterized by a rapidity of growth usually found in relatively young countries. In 1776 the total population of the thirteen colonies was two and one-half million, or about the same as the present population of a single state such as Tennessee, Alabama, Iowa, or Oklahoma.

In recent years there has been a gradual slowing down of the rate of increase. The recent annual increase has declined from the high point of two million per year in 1923 to about nine hundred thousand in 1931. If present trends continue, the total population is expected to reach about 145,000,000 by 1950.

The child population under the age of twenty increased from 33,681,074 to 47,608,991 be-

tween 1900 and 1930. Sixty-seven percent of this gain took place between 1900 and 1920, while only 33 percent of it occurred between 1920 and 1930. In this latter period the number of children under the age of five years actually decreased 128,840, of which 66,464 were in the age group under one year. In 1930 there were fewer children under five years of age than in the five- to nine-year group. This condition did not exist in any census report prior to 1930. These figures reflect the decline in birth rate.

The rate of increase of the white population was more than twice that of negroes between 1900 and 1920, but the rates have not greatly differed between 1920 and 1930. Altho involving small numbers, the rate of increase of Mexicans, Indians, and Japanese has been more rapid than that of whites since 1920. In general, however, there has been a drop in birth rates among the foreign-born residents.

Geographical Distribution and Density

The Westward Movement from the thirteen original states across the continent has been

¹ Based upon: U. S. Department of Commerce, Bureau of the Census. *Population: Number and Distribution of Inhabitants*, Vol. I, Washington, D. C.: Government Printing Office, 1931. 1268 p. ¶ President's Research Committee. *Recent Social Trends*. New York: McGraw-Hill Book Co., 1933. Chapters 1, 9, and 15. ¶ Schwesinger, Gladys. *Heredity and Environment*. New York: Macmillan Co., 1933. p. 137-40. ¶ Garth, Thomas R. *Race Psychology*. New York: McGraw-Hill Book Co., 1931. Chapter 13, "The Evaluation of Races," p. 204-21. ¶ Lorimer, Frank, and Osborn, Frederick. *Dynamics of Population*. Part II, "Measurable Characteristics of American Groups," p. 99-176. New York: Macmillan Co., 1934. 461 p. ¶ Landman, Jacob H. *Human Sterilization*. New York: Macmillan Co., 1932. p. 291-93. ¶ Thompson, Warren S., and Whelpton, P. K. *Population Trends in the United States*. New York: McGraw-Hill Book Co., 1933. 415 p.

much discussed in American history. Less attention has been given to the northward migration of negroes, the depletion of rural areas by the movement to cities, the shifting of population from the center to the edges or suburbs of metropolitan areas, and the recent concentration of population in certain sections of the country.

In 1900 about 60 percent of the total population lived in rural communities of less than 2500 persons, while in 1930 the proportion was only slightly more than 40 percent. The rural-farm population declined about 1,200,000 between 1920 and 1930. One reason for this shift was the improvement of agricultural methods and machinery with the subsequent decline in demand for workers; another was the attraction that city living conditions held for some farmers. Between 1930 and 1932 the shortage of urban employment reversed the trend, as shown by the net gain of the farming areas of over 760,000 persons. In 1933, however, the trend reversed again with 227,000 more persons leaving the farms for the cities than there were returning to the farms.

Concentration of population in metropolitan areas (i.e., cities over 100,000 population) is now accompanied by a shifting of homes and services to the suburbs. This trend outward is producing new patterns with reference to factors such as sex, age, and economic status within the congested areas. For example, in 1930 the distribution of children in all but four of the

96 metropolitan districts showed a higher percentage under fifteen years of age outside of the central city than within it.

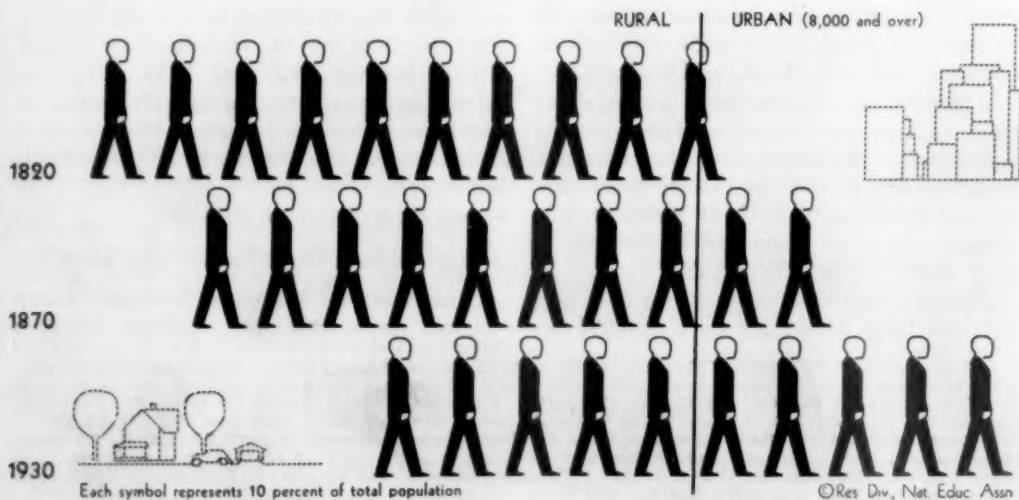
The drought during 1934 has renewed the suggestion that some sections of the country are poorly suited for habitation and use, while other areas should maintain larger populations. That this is more than a theory is shown by the shifts in population which took place between 1920 and 1930. Sixty percent of the increase in that period took place in five well-defined areas. These districts are: (1) the Atlantic seaboard in the vicinity of New York; (2) the Great Lakes region; (3) the metropolitan areas of Alabama, Florida, Georgia, North Carolina, and Tennessee; (4) the cities of Missouri, Oklahoma, and Texas; and (5) the metropolitan districts of the Pacific coast.

Quality

Changes in the quality of the population are difficult to measure but some significant facts are available. Tests of intelligence, whether measuring heredity or environment, have revealed that a high birth rate is often associated with low levels of intelligence and inferior economic status.

Often the opponents of unrestricted immigration have contended that it lowered the quality of the population. This assertion involves the complex and unsettled controversy concerning racial superiorities. The problem of

URBANIZATION OF THE POPULATION



immigration is less acute today because of the present quota system and the restrictive influence of temporary executive orders affecting immigration and deportations. Since 1931 more persons of foreign birth have been leaving the United States than have entered.

The eugenics movement, aimed at the improvement of the racial stock, has been partly responsible for the trend in favor of the sterilization and the segregation of defectives.

Educational Implications²

The declining birth rate will give the educational system the opportunity to integrate and to enrich the program. Heretofore a major problem has been one of housing and providing minimum essentials for a rapidly expanding school population. The increase in the relative proportion of adults will doubtless cause some shift of school efforts into the field of adult education.

The movement of population from the center to the fringe of metropolitan areas, is forcing

the extension of school facilities into the suburbs. In many instances the city and rural educational facilities may be merged and efforts directed toward an integrated educational program covering an entire county or larger subdivision of the state. With these movements of population older social controls tend to deteriorate. By means of traveling schools and libraries, correspondence courses, visiting teachers, nurses, bus transportation, and other practises, the harmful educational effects of a mobility may be partly overcome.

The educational disadvantages suffered by some states and many rural areas must be removed. With a mobile population, some communities that maintain excellent schools, acquire citizens with inferior knowledge as to health, housing, and culture. The better schools often do not reach the shifting child population during the impressionable years. In the long run it will pay us dividends in human welfare if every child is guaranteed an excellent education regardless of residence and mobility.

² For further educational implications consult: Bonar, J. *Theories of Population from Raleigh to Arthur Young*. New York: Greenberg Publisher, Inc., 1931. 253 p. ¶ Dublin, Louis. "Are There Too Many of Us?" *New Outlook* 161: 27-29; March, 1933. ¶ Engelhardt, N. L., and Engelhardt, Fred. *Planning School Building Programs*. New York: Teachers College, Columbia University, 1930. Chapters 1, 2, and 3 on forecasting population changes. p. 1-90. ¶ Gosney, Ezra S., and Popenoe, P. B. *Sterilization for Human Betterment*. New York: Macmillan Co., 1929. 202 p. ¶ McKenzie, R. D. *The Metropolitan Community*. New York: McGraw-Hill Book Co., 1933. 352 p. ¶ Ogburn, William F., editor. *Social Change and the New Deal*. Chicago: University of Chicago Press, 1934. Chapters on "Agriculture and Rural Life" and "The Tennessee Basin," p. 59-71, 81-89. ¶ Punke, H. H. "Educational Implications of a Mobile Population." *Elementary School Journal* 33: 514-26; March, 1933. ¶ U. S. Department of Commerce, Bureau of the Census. *Metropolitan Districts; Population and Area*. Washington, D. C.: Government Printing Office, 1932. 253 p. ¶ Whelpton, P. K. "Populations; Trends in Differentials of True Increase and Age Composition." *Social Changes in 1929*. Chicago: University of Chicago Press, 1930. p. 870-80. (Reprinted from *American Journal of Sociology*, May, 1930.)

REPLACEMENT RATE OF WHITE POPULATION

NECESSARY



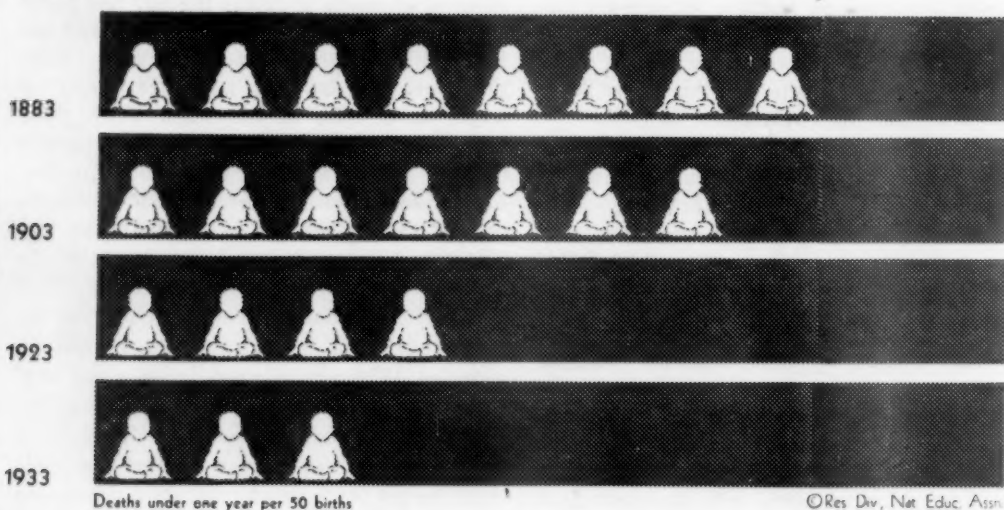
OBSERVED



Children under 5 for each 20 white women of ages 20 to 44

©Res. Div., Nat. Educ. Assn.

INFANT MORTALITY



Deaths under one year per 50 births

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II. Health and Vitality¹

There has been a growing demand, particularly in the past thirty years, for social measures to increase the physical well-being of individuals. The crowding of people into urban areas has increased the dangers from communicable diseases. The increased emphasis upon efficiency in a machine age has put a premium on good health. Yet ignorance, indifference, and low economic status keep many from receiving necessary medical and dental care.

There have been marked improvements in the field of medical care. While the number of physicians per 100,000 in population has decreased from 173 in 1900 to 126 in 1930, the skill and training of the individual physician have improved. Within recent years the extensive use of anesthesia, aseptic surgery, bacteriology, radiography, and other applications of scientific knowledge has resulted in at least twenty-five recognized fields of specialization among physicians. Whereas 3,456 nurses were graduated at the beginning of the century, 25,000 were prepared for service in 1930. Within thirty years the number of clinics has multiplied 60 times. Since 1873 the number of hospital beds has increased from 35,000 to approximately one million. At the same time

the equipment of hospitals and clinics has made possible the steady improvement of the quality of service. Today close to one million and a half persons are either directly or indirectly engaged in the promotion of health.

The increased participation of the government in the promotion of physical well-being is another marked trend. Today twenty-five agencies of the federal government are concerned with problems of public health, and the budget of one of these, the Public Health Service, increased almost sevenfold between 1910 and 1933. State and local governments have entered into scientific research, the control of communicable disease, the operation of clinics, the collection of vital statistics, and similar services. Beginning with the first state diagnostic laboratory in 1894, this movement has increased until there are fulltime directors of such activities in forty states today. Between 1923 and 1931 the number of hospital beds maintained separately and jointly by city and county governments increased about 37,000, or to a total of 153,072.

As a result of the foregoing medical advances, and because of the improvement of water supplies, food inspection, drainage sys-

¹ Based upon: President's Research Committee. *Recent Social Trends*. New York: McGraw-Hill Book Co., 1933. Chapters 12 and 21. ¶ Gillette, John M., and Reinhardt, James M. *Current Social Problems*. New York: American Book Co., 1933. Chapters 12, 13, and 14. ¶ Committee on the Costs of Medical Care, Ray Lyman Wilbur, chairman. *Medical Care for the American People*. Chicago: University of Chicago Press, 1932. p. 2-35.

tems, and other conditions, there has been a significant decline in illness and death due to disease. Smallpox, typhoid fever, diphtheria, tuberculosis, and malaria are the fields of greatest gains. The number of deaths due to diabetes, cancer, and heart ailments is increasing. Deaths and injuries from automobiles have increased to alarming totals. While authorities do not agree as to trends, the number of adults known to be suffering from mental defects and impairments is larger today than in 1900.

Some of the greatest gains in health have been made with children. It has been estimated that the life expectancy at birth was about 35 years in 1789 as compared with about 60 years in 1929. In 1900 about 51 percent of all deaths were among children under the age of five years; in 1928 only 27 percent of all deaths were in this age group. There has been a rapid decline in infant mortality from gastro-intestinal diseases. Deaths of children from automobile accidents have increased until they are exceeded only by deaths from tuberculosis and heart disease.

Brief notice only can be given here to other trends of great social significance: (1) the concentration of medical skill and medical facilities in the cities and wealthier states; (2) the lack of financial support of governmental agencies in areas not adequately served by private practise; (3) the increased cost of skilled medical services; and (4) the incomplete co-ordination of efforts among those engaged in the promotion of health.

Educational Implications²

The scientific progress in the health movement makes available an evergrowing body of information for instruction in hygiene. The medical profession has pointed out frequently the lag between the growth of scientific knowledge for the alleviation of suffering and the

understanding of the population in matters of private and public health. Much is being done today in schools to teach the advantages of personal cleanliness, the dangers of self-medication, the prevention of communicable diseases, the care of the human body, the possibilities of proper diet, the need for exercise, and the truth about nostrums and quackery. More can be done along all of these lines, not only with children, but with the adults reached thru parent-teacher meetings, school publications, and the personal attention of teachers and nurses.

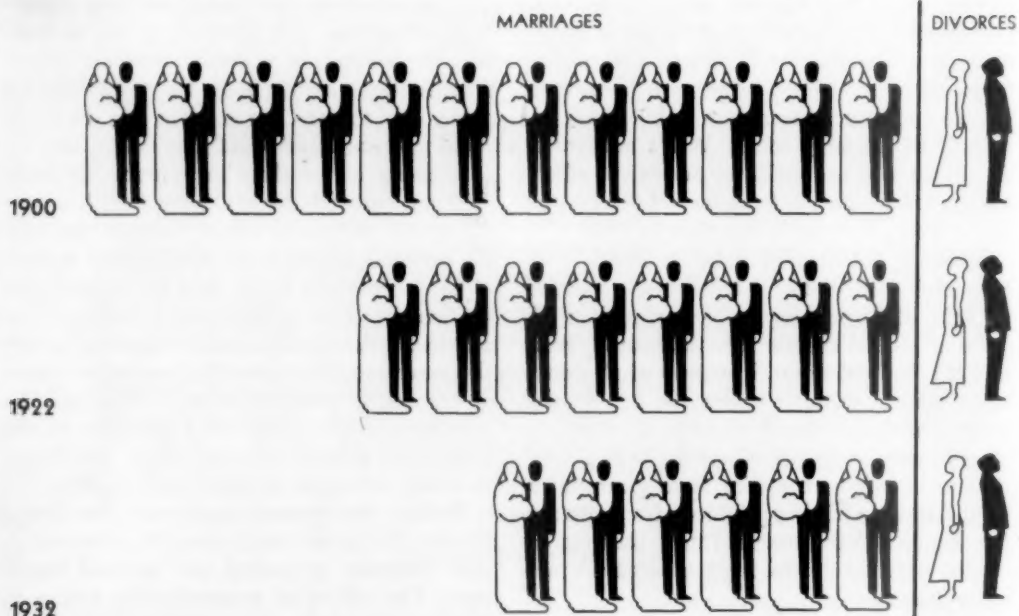
The possibilities in the field of accident prevention have received increased attention in recent years. A broader school program of activities is reaching back into the home where most of the minor accidents occur. Death and injury from street traffic are responding to the instruction given within classrooms and the restraining influences of pupil traffic patrols.

Perhaps the greatest opportunity for future service lies in the early detection, prevention, and treatment of mental and physical handicaps. The efforts of parent-teacher groups to eliminate certain handicaps before a child enters school need to be widely extended. Systematic physical and mental tests thruout childhood will help teachers to deal intelligently with individual differences in pupils. The possibility of reducing mental and emotional maladjustments by better handling of competition, marks, disciplinary practises, testing, and other practises will be explored carefully by teachers.

Schoolhouse planning will doubtless continue to profit by the advances made in the fields of architecture, ventilation, heating, lighting, and sanitation. It will be found socially unwise in the light of scientific evidence for pupils to continue to attend school in buildings which fail to meet health standards as to drinking fountains, play spaces, and toilet facilities, and which are not safe against fire, tornado, and earthquake hazards.

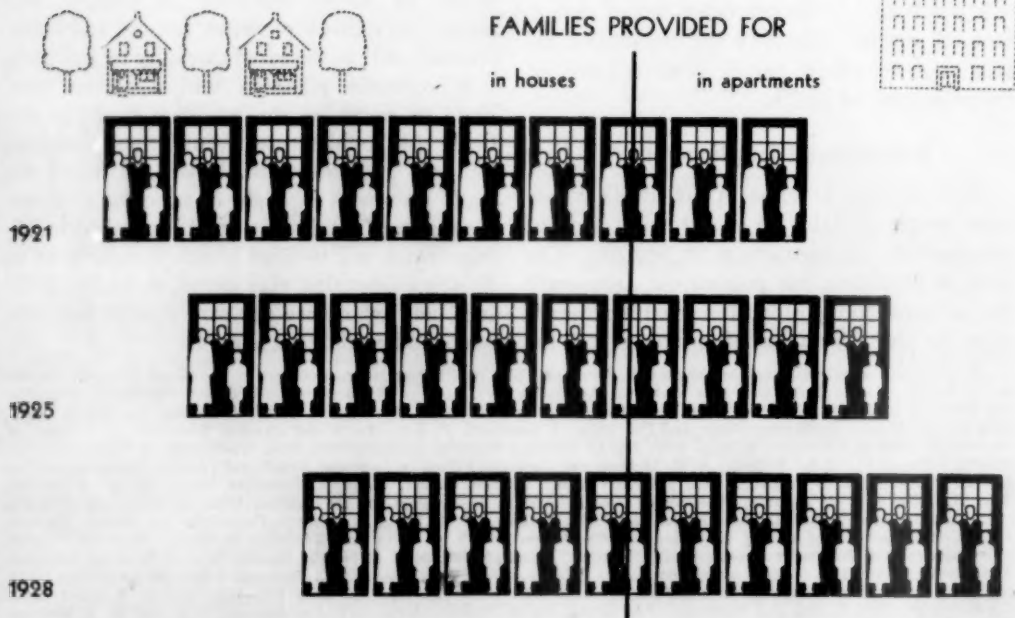
² For further educational implications consult: American Child Health Association. *Influence of Social and Economic Factors on the Health of the School Child*. New York: the Association, 1932. 144 p. ¶ American Child Health Association. *Principles and Practices in Health Education*. New York: the Association, 1930. 485 p. ¶ Beers, C. W. *The Mind that Found Itself*. Garden City, N. Y.: Doubleday, Doran and Co., 1923. ¶ Brammell, P. Roy. *Health and Physical Education*. U. S. Dept. of the Interior, Office of Education, Bulletin, 1932, No. 17. National Survey of Secondary Education, Washington, D. C.: Government Printing Office, 1933. 98 p. ¶ Davis, E. C. *Methods and Techniques Used in Surveying Health and Physical Education in City Schools*. Contributions to Education, No. 515. New York: Teachers College, Columbia University, 1932. 162 p. ¶ Martens, Elise H. *Adjustment of Behavior Problems of School Children*. U. S. Dept. of the Interior, Office of Education, Bulletin, 1932, No. 18. Washington, D. C.: Government Printing Office, 1932. 78 p. ¶ National Committee for Mental Hygiene. *Psychiatric Examination of a Child*. New York: the Committee, 1926. 7 p. ¶ National Education Association, Research Division. "The Principal and Progressive Movements in Education." *Research Bulletin* 7: 56-66, 96; March, 1929. ¶ National Education Association and American Medical Association. *Health Education*, rev. Washington, D. C.: National Education Association, 1930. 251 p. ¶ Sydenstricker, Edgar. *Health and Environment*. New York: McGraw-Hill Book Co., 1933. 217 p. ¶ White House Conference on Child Health and Protection. *The School Health Program*. New York: Century Co., 1932. 400 p. ¶ Winslow, C. E. A. "Health." In *Whither Mankind*. New York: Longmans, Green and Co., 1928. p. 187-207. ¶ Wynne, S. W. "Making Children Physically Fit for School." *Parents' Magazine* 9: 21; September, 1934.

RATIO OF MARRIAGES TO DIVORCES



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TREND TO APARTMENTS IN NEW CONSTRUCTION



Each symbol represents 10 percent of families provided for in new construction

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III. Home and Family Life ¹

The role of the family in society has been undergoing change for centuries. Religious functions have been transferred largely to the church, handicraft to the factory, much of the formal education of the young to the school, and defense to the police and other armed forces. There still remain vestiges of these functions within the home, but the major remaining activities are those of rearing children, developing character, promoting social contacts, and providing for leisure.

A relatively larger proportion of the population over 15 years of age is married today than at the beginning of the century. The percent married was 55.7 in 1900 and 60.5 in 1930. Out of every 1,000 young people 15-19 years of age, fifteen more were married in 1930 than in 1890. Seventy-three more per thousand were married in 1930 than in 1890 of the age group 20-24 years.

There has been a small decline in the size of families during the past thirty years. In 1900 the average size of family was 3.67, in 1920 it was 3.58, and in 1930 it was 3.57. When analyzed in terms of rural or urban residence, changes in family size become more significant. On the average, farm families have increased in size while those in the largest cities have decreased.

A significant trend in recent years has been the influence upon family life of the applications of science and invention. Between 1920 and 1930 the number of domestic consumers of gas increased almost twice as fast as the number of families. Labor in the home has been reduced thru the development of such electric appliances as irons, percolators, washing machines, vacuum cleaners, and refrigerators.

These innovations have combined with the small size of families and other factors to give women greater freedom from home duties. In many instances this available time has been utilized by business and by industry as shown by a 60 percent increase between 1920 and 1930 of the number of married women gainfully employed.

The number of divorces is often cited as an evidence of the disintegration of the home. In 1900 there were 20 divorces for every 10,000 married persons, as compared with 36 in 1930.

Educational Implications ²

Should public schools continue to accept the responsibilities formerly carried by the home? Thru adult education it may be possible to return to the home some of the responsibility for maintaining or supplementing various phases of child care.

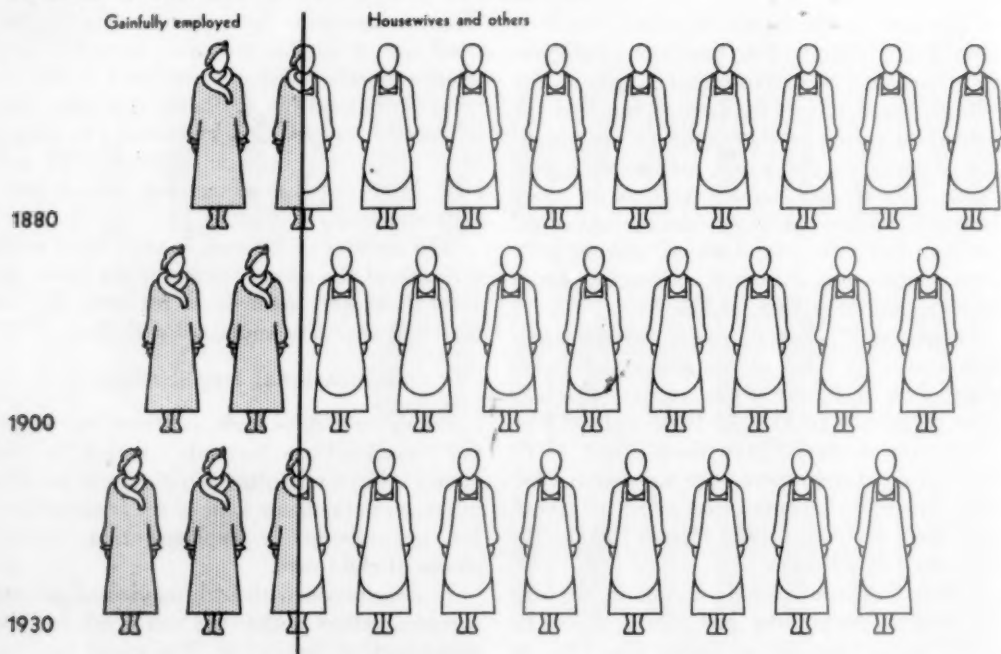
In cooperation with both public and private agencies, school authorities can work for the enrichment of family life. The school may become a recreational and community center attended by young and old alike. Child guidance clinics can be developed to help parents understand and prevent the problems of childhood.

There is a possibility also that high schools and colleges will enter more directly into the work of preparing young men and women for marriage and parenthood. Courses in child care, psychology, sex education, sociology, family budgeting, purchasing, probably will increase in number to supplement the existing instruction in home economics. School activities on the elementary level may include more opportunities for developing attitudes and understanding of the individual's role in family life.

¹ Based upon: Seligman, Edwin R. A. *Encyclopedia of the Social Sciences*. New York: Macmillan Co., 1931. Vol. VI, p. 65-73. ¶ President's Research Committee. *Recent Social Trends*. New York: McGraw-Hill Book Co., 1933. Chapter 13. ¶ Ogburn, William F., editor. *Social Changes in 1929*. Chicago: University of Chicago Press, 1930. p. 1017-26. ¶ Gillette, John M., and Reinhardt, James M. *Current Social Problems*. New York: American Book Co., 1933. p. 539-70. ¶ U. S. Department of Commerce, Bureau of the Census. *Marriage and Divorce, 1932*. Washington, D. C.: Government Printing Office, 1934. 29 p.

² For further educational implications consult: Cooper, William J., sponsor. *A Symposium on the New Home-Making Education*. U. S. Department of the Interior, Office of Education, Bulletin, 1933, No. 3. Washington, D. C.: Government Printing Office, 1933. 56 p. ¶ Groves, Ernest R., and Ogburn, W. F. *American Marriage and Family Relationships*. New York: Henry Holt & Co., 1928. 497 p. ¶ Hanna, Paul R. "Adjusting the Home Economics Program to the Present Economic Situation." *Teachers College Record* 34: 386-97; February, 1933. ¶ Lindquist, Ruth. *The Family in the Present Social Order; A Study of Needs of American Families*. Chapel Hill: University of North Carolina Press, 1931. 241 p. ¶ Miller, Ellen. "Education for Family Living in a Changing World." *Journal of Home Economics* 26: 1-5; January, 1934. ¶ National Congress of Parents and Teachers. *Parent Education*. Fourth Yearbook. Washington, D. C.: the National Congress, 1934. 268 p. ¶ Pierce, H. W. "Junior High School and Home Membership." *Junior-Senior High School Clearing House* 8: 241-49; December, 1933. ¶ President's Conference on Home Building and Home Ownership. See particularly *Planning for Residential Districts* (1932, 227 p.), *Farm and Village Housing* (1932, 293 p.), and *Homemaking, Home Furnishing, and Information Services* (1932, 238 p.). Washington, D. C.: National Capital Press, Inc. ¶ Watson, G. B. "Education for New Homes and New Economics." *Journal of Home Economics* 25: 651-59; October, 1933. ¶ White House Conference on Child Health and Protection. *The Home and the Child*. New York: Century Co., 1931. 161 p. ¶ Young, Donald, editor. *Modern American Family*. Annals of the American Academy of Political and Social Science, Vol. 160. Philadelphia: the Academy, 1932. 256 p.

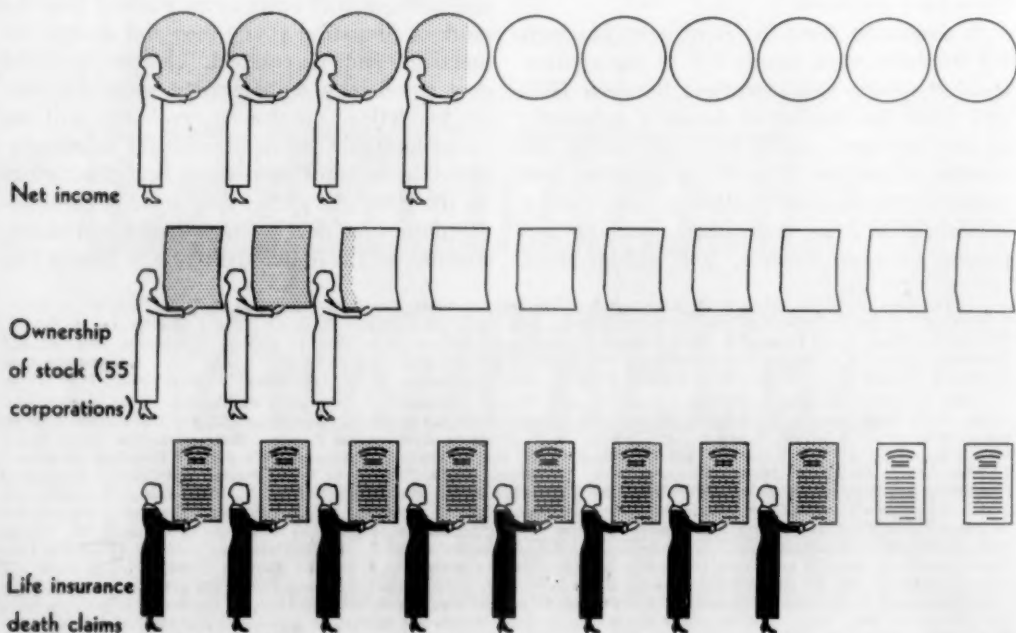
MORE WOMEN GAINFULLY OCCUPIED



Each figure represents 10 percent of all women 16 years and over

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CONTROL OF FINANCIAL POWER BY WOMEN



Each symbol represents 10 percent of the total

©Res. Div., Nat. Educ. Assn.

IV. Position of Women¹

Changes in the home and in family life have had their influence on the part played by women in the nation's life during the past three decades. Released from many of the responsibilities of the household, they are finding places for themselves in new occupational fields and are participating to an increasing degree in local, state, and national activities.

Between 1900 and 1930 the number of women gainfully employed increased from 206 to 253 per 1,000 women sixteen years of age and over. The proportion which employed women were of all gainfully occupied persons increased from 17.7 percent to 21.9 percent during the same period. Also the ratio of married women who work to the total number of married women increased from 5.6 to 11.7 percent since 1900.

Domestic and personal types of services continue to include the largest proportion of women workers. The proportion of women in professions is increasing, altho 95 percent of all professionally employed women are found today in teaching and nursing. Women's earnings are low and usually smaller than those of men engaged in similar work.

The educational status of women has shown steady advances. Before the nineteenth century it was generally argued that, since women were to become homemakers, they needed little education beyond the elementary school. In 1900 the 36,051 women students in colleges represented 34.6 percent of the total enrolment in higher education. By 1930 the percent of women students had increased to 41.4 and the total number to 311,842.

The legal status of women has shown some general improvement. The first mothers' aid bill was adopted in 1911 and by 1930 the movement had spread to 44 states and the Dis-

trict of Columbia. Until late in the nineteenth century the married woman had no property rights. By 1930 only 9 states made restrictions upon the property rights of the wife which did not also apply to husbands. Recognition of equal rights in the guardianship of children prevailed in only 14 states in 1900 but had spread to 39 states by 1930. There still exist in a few states legal restrictions of married women which do not apply to single women. In the field of equal legal rights women's organizations show an increasing interest.

Educational Implications²

The employment of an increasing number of women in gainful occupations has accelerated the pressure on higher education for specialized training. Universities will continue to enrich the training offered to women students for nursing, public health, welfare work, teaching, and other lines of social service. In secondary education, courses in homemaking, secretarial work, commercial art, nursing, and designing will prove increasingly attractive to those who will eventually seek employment.

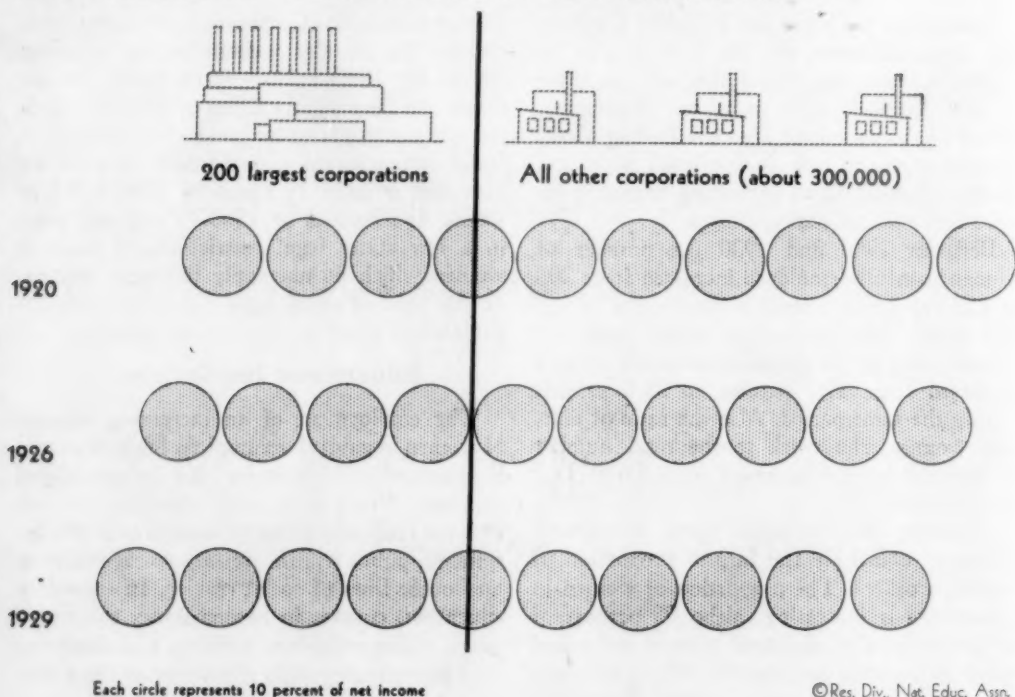
Perhaps the greatest need, with the development of vocational education for women, will be for the improvement of guidance services. In terms of available employment there is at present overcrowding in certain occupations.

The continued employment of married women outside the home is already leading to the development of public and private organized educational opportunities for young children. The present kindergarten and nursery school movement may result in the creation of a primary unit preceding the present elementary school. These units may function more as child-study classes and guidance clinics for parents, than as formal classes for children.

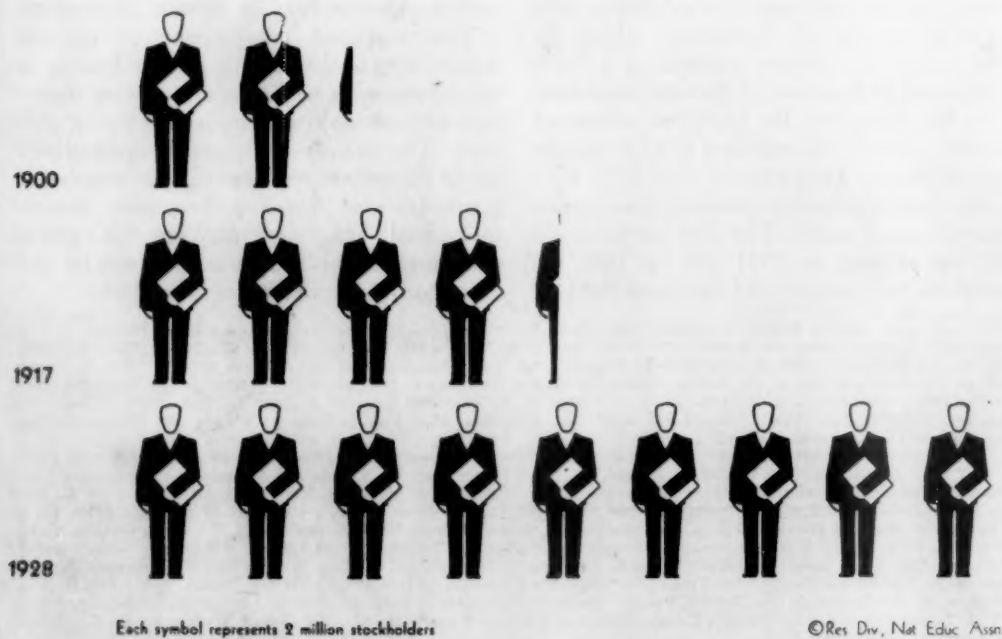
¹ Based upon: Ogburn, William F., editor. *Social Changes in 1929*. Chicago: University of Chicago Press, 1930. p. 1091-96. ¶ President's Research Committee. *Recent Social Trends*. New York: McGraw-Hill Book Co., 1933. p. 679, 709-50, 770. ¶ Gillette, John M., and Reinhardt, James M. *Current Social Problems*. New York: American Book Co., 1933. p. 539-620. ¶ U. S. Department of Commerce, Bureau of the Census. *Women in Gainful Occupations, 1870 to 1920*. Washington, D. C.: Government Printing Office, 1929. 416 p. ¶ Breckenridge, S. P. *Women in the Twentieth Century; A Study of Their Political, Social, and Economic Activities*. New York: McGraw-Hill Book Co., 1933. 364 p. ¶ Branch, Mary S. *Women and Wealth*. Chicago: University of Chicago Press, 1934. 153 p.

² For further educational implications consult: American Woman's Association. *The Trained Woman and the Economic Crisis*. New York: the Association (353 W. 57th St.), 1931. 102 p. ¶ Beard, Mary R. "College and Alumnae in Contemporary Life." *American Association of University Women Journal* 27: 11-21; October, 1933. ¶ Elliott, Margaret, and Manson, Grace E. *Earnings of Women in Business and the Professions*. Ann Arbor: Bureau of Business Research, University of Michigan, 1930. 215 p. ¶ Institute of Women's Professional Relations. *After College, What?* Bulletin No. 4. Greensboro, N. C.: North Carolina College for Women, 1932. 200 p. ¶ Manson, Grace E. *Occupational Interests and Personality Requirements of Women in Business and the Professions*. Ann Arbor: Bureau of Business Research, University of Michigan, 1931. 409 p. ¶ National Civic Federation, Women's Department. *The Woman Power of the Nation*. New York: the Federation (9 E. 40th St.). No date. Part I, 24 p.; Part II, 39 p. ¶ Ogburn, W. F. "Outlook for the Trained Woman." *American Association of University Women Journal* 27: 146-52; April, 1934. ¶ U. S. Department of Labor, Women's Bureau. *Women at Work; A Century of Industrial Change*. Washington, D. C.: Government Printing Office, 1933. 51 p.

NET INCOME OF NON-FINANCIAL CORPORATIONS



STOCKHOLDERS IN AMERICAN CORPORATIONS



V. Economic Organization¹

The material development of the United States has been closely associated with organized commercial groups. The earliest permanent settlements were made by trading companies. In the period preceding the Civil War vast business enterprises involving furs, land, railroads, steamboats, and mining kept pace with or preceded the Westward Movement.

Even in 1900 three-fourths of our manufactured products came from factories owned by groups of stockholders, and since then concentration has gone steadily forward. In 1900 there were 20 bank mergers, 172 in 1920, and 735 in 1930. In 1919, in manufacturing and mining fields, 438 organizations disappeared thru mergers; in 1928, about 1,000 went out of existence by the same route. Public utilities disappeared by various types of consolidation at the following rates: 22 in 1919, 426 in 1923, and 585 in 1928. By 1930 one-fifth of all retail trade was transacted by chain stores.

In addition to merging and purchasing, the practise of establishing holding companies has been a method of concentrating control. In 1930 subsidiaries of holding companies supplied 72 percent of the nation's electricity, 42 percent of the gas, and 31 percent of the traction services.

The present high degree of concentration is shown further by the fact that in 1929 two hundred corporations out of a total of 300,000 non-financial companies controlled almost 50 percent of the corporate wealth and received 43 percent of the non-banking corporate income. It has been estimated that if these corporations continue to grow at their average annual rate for the years 1909 to 1929, they will control half of the wealth by 1950.

The growth of large corporations represents primarily an expansion in administrative and

managerial powers. Accompanying this tendency to *limit* the number of administrators, there has been a movement to *expand* ownership by increasing the number of stockholders. Since the World War the savings and other financial resources of the general public have been increasingly tapped by sales of commercial stocks and bonds. Between 1913 and 1931 the number of stockholders in each of our largest railroad, steel, and telephone companies increased approximately three-, four-, and eleven-fold respectively. People other than those with the 100,000 largest incomes received 22 percent of all corporate dividends in 1916 and 45.8 in 1927.

D Educational Implications² ~~ff~~

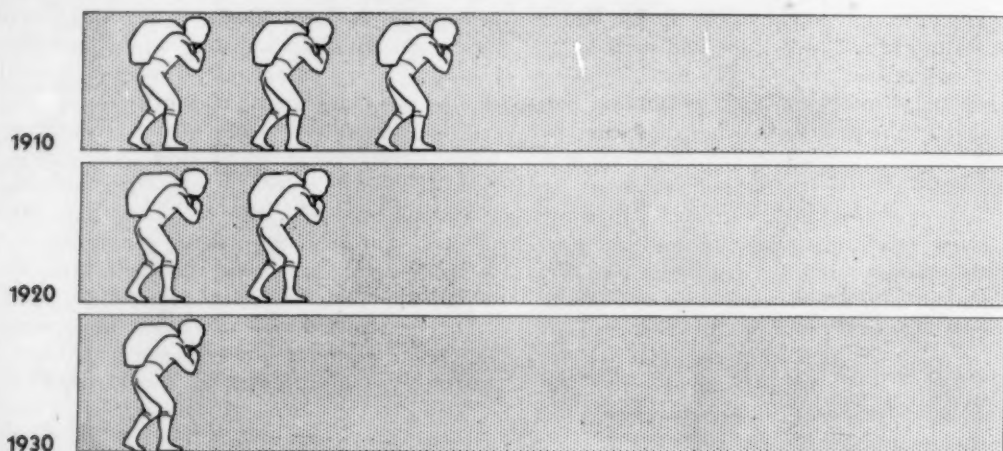
The growth of the number of corporations, their increasing financial power, and the expansion of the number of owners provide vital materials for the school curriculum. Examination of the history of particular corporations is illuminating as to the ethics which have often characterized our developing economic structure. From such studies students will understand why government has often found it necessary to intervene in the interest of the happiness and security of the general public. Further exploration should be made into legislation and into the types of governmental machinery that have been developed to supervise business.

It will be increasingly necessary for education to help students to understand the principles of wise investment. The stock market crash in 1929 revealed in many cases the failure of the American people to distinguish between investing and gambling. The federal government's efforts to prevent unwise speculation and unsafe investments should be thoroughly understood by those who will eventually be members of the investing public.

¹ Based upon: Berle, A. A., and Means, G. C. *The Modern Corporation and Private Property*. New York: Macmillan Co., 1933. 396 p. ¶ President's Research Committee. *Recent Social Trends*. New York: McGraw-Hill Book Co., 1933. Chapter 5. ¶ Atkins, Willard E., and Wubnig, Arthur. *Our Economic World*. New York: Harper & Bros., 1934. Chapters 17, 22, and 23. ¶ Beard, Charles A., and Beard, Mary R. *The Rise of American Civilization*. New York: Macmillan Co., 1930. Vol. I, p. 35-37; Vol. II, p. 176-77, 573.

² For further educational implications consult: Bonbright, James C., and Means, Gardiner C. *The Holding Company, Its Public Significance and Its Regulation*. New York: McGraw-Hill Book Co., 1932. 398 p. ¶ Leven, Maurice; Moulton, Harold G.; and Warburton, Clark. *America's Capacity to Consume*. Washington, D. C.: the Brookings Institution, 1934. 272 p. ¶ Lynd, R. S. "Education of the Forgotten Man." *Journal of Adult Education* 4: 378-82; October, 1932. ¶ Nourse, Edwin G., and others. *America's Capacity to Produce*. Washington, D. C.: Brookings Institution, 1934. 608 p. ¶ President's Conference on Unemployment, Committee on Recent Economic Changes. *Recent Economic Changes in the United States*. Published for the National Bureau of Economic Research. New York: McGraw-Hill Book Co., 1929. 2 v. ¶ Swope, Gerard. *The Swope Plan: Details, Criticisms, Analysis*. Ed. by J. G. Frederick. New York: Business Bureau, 1931. 221 p. ¶ Tugwell, Rexford G.; Munro, Thomas; and Stryker, R. E. *American Economic Life and the Means of Its Improvement*. New York: Harcourt, Brace and Co., 1931. 737 p.

CHILDREN 10 TO 15 GAINFULLY EMPLOYED



Each symbol represents 5 percent of all children 10 to 15 years old

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VI. Labor Conditions ¹

Even as late as 1880 the United States employed 50 percent of its working population in agricultural pursuits. With extensive industrialization the status and problems of labor have undergone rapid change. For years the demand for an increasing supply of labor in industry stimulated immigration and drew women and children into gainful employment. Shifts in the types of work and the introduction of intricate machinery have seriously disturbed employment and decreased the demand particularly for child labor. The rapid rise in the production of goods has been accompanied in general and with many uneven advances by better wages, a higher standard of living, and shorter hours of employment. Of course, since 1930 the trend toward higher living standards has been checked or reversed.

The trend in income is one indication of the changes in the purchasing power and the standard of living of the wage earner. In manufacturing groups the average annual income rose from \$558 in 1910 to \$1358 in 1920 and dropped to \$1325 in 1928. Employees of public utilities received on the average \$655 in 1910, \$1662 in 1920, and \$1558 in 1928. Farm labor averaged \$336 in 1910, \$810 in 1920, and \$587 in 1928. The "real earnings" of em-

ployed wage earners, expressed in index numbers with the year 1914 as the base 100, were 96 in 1890, 97 in 1900, 101 in 1910, 106 in 1920, and 132 in 1928.

The condition of labor has been improved, not only by wage increases but by a widespread reduction in the hours of work. Between 1890 and 1928 the hours of work per week in certain industries declined as follows: building, 52.0 to 43.5; cotton goods, 62.8 to 53.4; marble and stone, 54.7 to 44.0; and woolen goods, 58.9 to 49.3. Under the codes of the Recovery Administration, the most frequent provision is for a 40-hour week.

There has been a decline in the number of children employed. Of the age group between 10 and 15 years, 18 percent were gainfully occupied in 1890 as compared with 5 percent in 1930. Except for employment in agriculture, children under sixteen years of age constitute less than 1 percent of those employed in the major occupational groups. The NRA codes forbid the industrial employment of children under sixteen years of age and, in some of the more hazardous employments, the minimum age has been raised to seventeen or eighteen years. Children in agricultural areas have not

¹ Based upon: President's Research Committee, *Recent Social Trends*. New York: McGraw-Hill Book Co., 1933. Chapter 16.
 ¶ Atkins, Willard E., and Wubnig, Arthur. *Our Economic World*. New York: Harper & Bros., 1934. p. 289-314.

been similarly protected from early employment.

Of great significance has been the improvement of labor conditions thru state legislation. Workmen's compensation insurance was made compulsory in five states in 1911 and by 1929 similar laws existed in 44 states. Beginning in 1923, old-age pension laws had spread to 17 states by 1932. In 1908 the first state law limiting the hours of work by women was upheld by the United States Supreme Court. By 1930, 44 states limited the working day, 16 states prohibited night work, and 18 states required one day of rest in seven. Minimum wage laws for women began in 1912 and within a short time such laws had been passed in 14 states and the District of Columbia. In 1923 a ruling of the United States Supreme Court made these laws ineffective in all but Massachusetts and California.

The growth of labor organizations has been an important factor in the improvement of laboring conditions. In 1890 about 300,000 persons held membership in labor unions. Due to pressure to increase production, increased cost of living, unsatisfactory working conditions, and other factors, the membership in trade unions increased to 2,184,200 by 1910. By 1920 the total membership increased to over five million but declined during the years of prosperity. Under the stimulus of the depression and the NRA, the present enrolment probably exceeds the 1920 membership total. Trade unions, however, enrol only a small portion of the fifty million workers in the United States. Farm hands, unskilled laborers, office employees, and professional workers have not been included to any large extent in labor organizations.

A primary aim of the foregoing legislation and labor movements has been to insure economic security to workers. To many the recent depression has demonstrated the relative ineffectiveness of the steps taken so far. They believe that the insecurity of labor will be elim-

inated only by economic planning and control on a national basis. Of the many plans proposed, the NRA, the AAA, and the Tennessee Valley project have been put into actual operation.

Educational Implications²

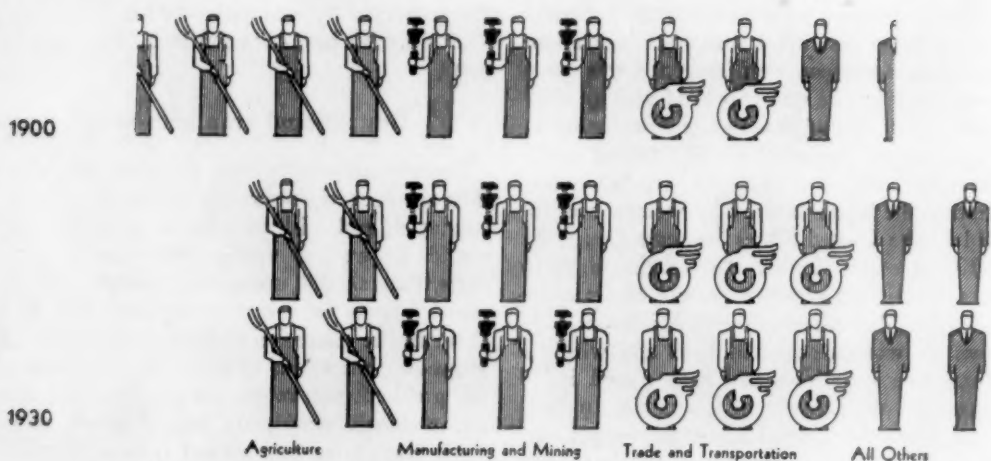
Since a majority of the students who pass thru the educational system will eventually be employed, and will be affected by conditions outside as well as within their own occupations, they should understand laboring conditions. Classes in the social studies will find value in the discussion of state participation in improving the status of wage earners. Among the problems that might be considered are old-age pensions, workmen's compensation, minimum wage laws, and similar legislative enactments.

Attention can be given to industrial disputes, strikes, lockouts, and other issues. Such study ought not to be limited either to the side of labor or to that of employers, but should be concerned primarily with the welfare of the general public. The purposes and activities of state labor departments, labor arbitration boards, and industrial relations committees are also subjects which young citizens may examine with interest.

To make these problems real, students may be taken in groups to visit local factories, labor meetings, conferences of business groups, public utilities, and the residential areas of all economic levels. The work of agencies for social welfare, such as the community chest, should be a part of the investigation. From surveys such as these many classes will be able to prepare tentative proposals for the amelioration of conditions and the improvement of industrial relations. Whether or not such proposals are practical for immediate application, they may, at least, stimulate thought both inside and outside the classroom.

² For further educational implications consult: Beard, Charles A., and Smith, G. H. *The Future Comes; A Study of the New Deal*. New York: Macmillan Co., 1934. 178 p. ¶ Chase, Stuart. *Men and Machines*. New York: Macmillan Co., 1929. 354 p. ¶ Hoffman, M. David. *Status of Voluntary Teachers' Organizations in Cities of 100,000 Population or More*. U. S. Dept. of the Interior, Office of Education, Bulletin, 1930, No. 36. Washington, D. C.: Government Printing Office, 1931. 42 p. ¶ Leven, Maurice; Moulton, Harold G.; and Warburton, Clark. *America's Capacity to Consume*. Washington, D. C.: Brookings Institution, 1934. 265 p. ¶ National Education Association, Department of Classroom Teachers. *The Economic Welfare of Teachers*. Sixth Yearbook. Washington, D. C.: the Association, 1931. 244 p. ¶ Nourse, Edwin G., and others. *America's Capacity to Produce*. Washington, D. C.: Brookings Institution, 1934. 608 p. ¶ Soule, G. H. *The Coming American Revolution*. New York: Macmillan Co., 1934. 314 p. ¶ Soule, G. H. *A Planned Society*. New York: Macmillan Co., 1932. 295 p. ¶ Tugwell, Rexford G., and others. *American Economic Life*. New York: Harcourt, Brace and Co., 1930. 68 p. ¶ U. S. Department of Labor, Bureau of Labor Statistics. *Unemployment-Benefit Plans in the United States and Unemployment Insurance in Foreign Countries*. Bulletin 544. Washington, D. C.: Government Printing Office, 1931. 385 p.

CHANGING OCCUPATIONAL DISTRIBUTION



Each figure represents 2,500,000 gainfully employed

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VII. Occupations¹

Urbanization, mechanization of industry, modern invention, rapid transportation, and improvement in communication have been major influences upon the occupations. So far as those employed are concerned there has been a shifting in the relative importance of occupations and a specialization within occupations. At the same time there has been, even in normal times, a persistent if not an increasing problem of unemployment.

Approximately 40 percent of the population of the United States are customarily engaged in gainful occupations. If women working as housewives in their own homes are included, the percentage of the population at work is about 60 percent. The proportion of children between the ages of 10 and 15, gainfully employed, has decreased from 18 percent in 1900 to less than 5 percent in 1930. At the opposite end of the occupational age scale the percentage of employed persons between the ages of 45 and 64 has increased 2 percent. In recent years, altho statistical data are conflicting, the probability is that strict hiring rules discriminate against workers who are above 45 years of age.

The attractiveness of urban life, modern agricultural methods, and other factors have reduced the proportion of gainfully employed persons engaged in agriculture from 36 percent

in 1900 to 21 percent in 1930. Mining, manufacturing, and the mechanical industries furnished employment to an increasing number of persons until 1920, when about 33 percent of the country's workers were in these occupations. Improved methods of production reduced the number of necessary workers in these fields so that in 1930 only a little over 30 percent of the working population were so engaged. The proportion of workers in the growing occupations of trade, transportation, and clerical work increased from 19 percent in 1900 to 29 percent in 1930.

✓ A study of occupational distribution over a long period of time shows that there is a definite shift from manual productive occupations to the supervisory and clerical occupations. Whereas in 1870 those employed in actual production of goods amounted to 75 percent of all employed persons, by 1930 the proportion had dropped to 50 percent. There has been a decided tendency, also, toward specialization.

Obviously no picture of occupations is complete without some attention to unemployment. The federal census in 1930 reported 3,187,647 persons as unemployed who were able and willing to work. The percent of male workers unemployed in certain groups were: coal miners, 21.5; building laborers, 24.1; laborers in manu-

¹ Based upon: President's Research Committee. *Recent Social Trends*. New York: McGraw-Hill Book Co., 1933. p. 268-324.
 † Ogburn, William F., editor. *Social Change and the New Deal*. Chicago: University of Chicago Press, 1934. p. 54-56.

facturing, 16.4; semi-skilled operatives in manufacturing, 14.6; and cooks, 11.2. Estimates of the total number of unemployed in the depression years differ. According to the American Federation of Labor, unemployed numbered 13,689,000 in 1930 and 6,700,000 in 1933.

Educational Implications²

It is important for educators to appreciate the shifting nature of occupations. In the past many vocational guidance programs have been based upon an occupational distribution assumed to be static. The shifting nature of employment calls for continuous and extensive surveys of opportunities in each community. Nationwide studies are necessary because the mobility of the population means that many adults do not live in the areas where they attended school.

So far as possible this vocational information will be supplied to each student so that he may know the types of workers required in each field, the personal qualities necessary for success, the possibilities of placement, and the likelihood of changes in occupation because of technological improvements. Pupils will need to know about the studies of employers' opinions which show that the demand is increasing for adaptability as well as for specialization in training. Employers also are anxious to have new employees who have had many social experiences which enable them to cooperate with others.

The findings of such studies clearly indicate that guidance is no longer a task solely for specialized counselors and experts. All teachers will find increasing opportunities for helping students to develop well-rounded, capable personalities. Research also indicates that much responsibility must be placed upon students for self-discovery, self-inventory, and self-guidance.

Instead of pupils beginning with a study of life outside, there will doubtless be an emphasis first upon the principle: "Know thyself." From this knowledge of his own potentialities the student will explore the needs and the demands of gainful employment.

Teachers and students will need to keep clearly in mind that occupational opportunities now available are dependent upon the present economic and industrial structure. If a greater amount of social planning is injected into modern life, education will have to take into account these changes. Education will need to collaborate actively with those agencies which are in closest contact with employment and industrial planning.

Schools will probably avail themselves increasingly of the services of representatives of local occupational groups. It will be far more realistic for students to observe a doctor at his clinic, or to study the machinist at his lathe than simply to read about these occupations in a book. After all, a job is more than the wages offered and the hours required; it includes all of the hazards and personal satisfactions of the daily environment. These can be experienced only by first-hand observation or by apprenticeship training.

New emphasis will have to be placed upon the retraining of workers as occupations change under social and scientific influences. Adults, particularly, who have specialized for years in declining types of employment will need the help of re-educational facilities. The school may function here in sustaining morale and in cultural stimulation, as well as in the replacement of skills that are no longer needed.

Education has a special problem of its own in the field of teacher training. Without some adjustment of supply to demand, professional standards may be lowered and the economic status of the teacher materially reduced.

² For further educational implications consult: Clark, Harold F. "Planning Occupational Distribution; How to Use All of the People to Do All of the Work." *Occupations* 12: 18-26; February, 1934. ¶ Coffman, Lotus D. "Education of Unemployed Youth." *School and Society* 38: 485-90; October 14, 1933. ¶ Edgerton, A. H. "When Jobs Change, Guidance Must Change." *Nation's Schools* 13: 13-17; June, 1934. ¶ Greenleaf, Walter J. *Guidance Leaflets*. (For example: "Chemistry and Chemical Engineering," No. 19, 1932; "Optometry," No. 22, 1934.) U. S. Dept. of the Interior, Office of Education. Washington, D. C.: Government Printing Office, 1931-34. ¶ Hall, O. M. "How Occupational Trends Are Studied; a Review and a Bibliography." *Occupations* 12: 27-42; February, 1934. ¶ Ickes, H. L. "The Old Order Changeth." *Occupations* 12: 5-8; March, 1934. ¶ McClaren, L. L. "Summer Schools for Workers in Industry." *Progressive Education* 9: 503-507; November, 1932. ¶ National Education Association, Department of Superintendence. *Character Education*. Tenth Yearbook. Washington, D. C.: the Association, 1932. p. 246-47. ¶ National Education Association, Research Division. "Teacher Demand and Supply." *Research Bulletin* 9: 305-408; November, 1931. ¶ Peffer, Nathaniel. *New Schools for Older Students*. New York: Macmillan Co., 1926. 250 p. ¶ Reavis, William C. *Programs of Guidance*. U. S. Dept. of the Interior, Office of Education, Bulletin, 1932, No. 17. Washington, D. C.: Government Printing Office, 1933. 144 p.

VIII. Wealth and Income ¹

Except for periods of economic depression the general trend of wealth—the total value of the goods owned by the people of the nation—has been to increase consistently with population growth. The total wealth of the United States in current dollars increased from 85.5 billions of dollars in 1900 to 488.7 billions in 1920; it fell to 317.2 billions in 1921, reached 361.8 billions in 1929, and declined to 247.3 billions in 1932.

The distribution of wealth varies widely between individuals and sections of the country. Some contend that wealth has tended to become concentrated in the hands of a few, while others hold that there is little evidence that any radical change in the distribution of wealth has taken place in the past several decades. In 1926, a study of estates by the Federal Trade Commission indicated that 59 percent of the wealth was owned by 1 percent of the people; 81.9 percent was held by 5.3 percent. It was also reported that for the period investigated (1912-23) there was an apparent trend toward a wider distribution of wealth.

National income, consisting chiefly of the

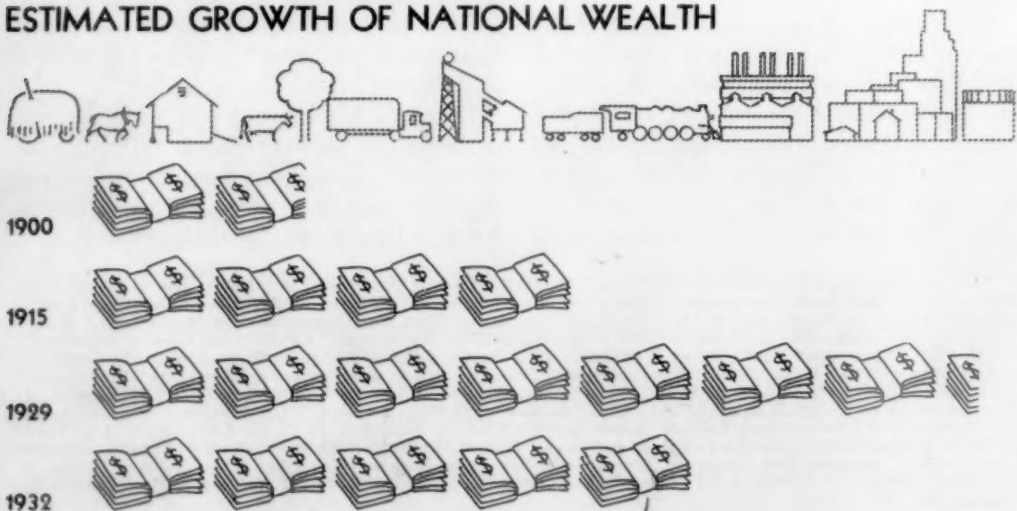
salaries, wages, interest, rent, and dividends received by the American people, is usually more accurately estimated than national wealth. The total income of 27.2 billions of dollars in 1909 increased to 60.2 billions in 1918 and then to an estimated high point of 83.0 billions in 1929. During the four years from 1930 to 1933 inclusive, the estimates in billions of dollars varied as follows: 70.3, 54.6, 39.4, and 40.7 respectively. The per capita income in current dollars has been estimated as increasing from \$300 in 1909 to \$642 in 1919, and \$683 in 1929. Since 1930 the annual per capita income varied as follows: 1930, \$571; 1931, \$440; 1932, \$315; 1933, \$324.

According to the federal income tax returns for 1930, only 3,707,509 persons out of about 50 million gainfully employed had large enough incomes to pay a tax. Seventy-five percent of those reporting received \$5000 or less in 1930. It is estimated that in that year the average wage earner received between \$1500 and \$2000, while the average farmer received about \$1000 in cash income.

Recently published estimates of the distribu-

¹ Based upon: U. S. Department of Commerce, Bureau of the Census. *Wealth, Public Debt, and Taxation, 1922*. Washington, D. C.: Government Printing Office, 1924. p. 18. ¶ U. S. Department of Commerce. *National Income, 1929-32*. Washington, D. C.: Government Printing Office, 1934. p. 10. ¶ National Industrial Conference Board. *Conference Board Bulletin*. "National Wealth and National Income," No. 62, p. 493-500, February 20, 1932; "National Income in 1931 and 1932," 7: 13-15, February 20, 1933; "Estimating the National Wealth," 7: 33-35, May 20, 1933; "Revised Estimates of National Income," 8: 15-16, February 20, 1934; "National Income and Its Elements," 8: 33-40, May 10, 1934. ¶ U. S. Federal Trade Commission. *National Wealth and Income*. Washington, D. C.: Government Printing Office, 1926. p. 58. ¶ Leven, Maurice; Moulton, Harold G.; and Warburton, Clark. *America's Capacity to Consume*. Washington, D. C.: Brookings Institution, 1934. p. 87-88. ¶ Atkins, Willard E., and Wubning, Arthur. *Our Economic World*. New York: Harper & Bros., 1934. p. 157-67. ¶ President's Research Committee. *Recent Social Trends*. New York: McGraw-Hill Book Co., 1933. p. 228-32, 360-61.

ESTIMATED GROWTH OF NATIONAL WEALTH



Each symbol represents 50 billion dollars

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tion of national income indicate that, in 1929, more than 42 percent of the population of the United States received only about 11 percent of the national income, while, at the other extreme, 2.4 percent of the population received about 29 percent of the national income. There are students of this problem who believe that during the past decade the inequality in the distribution of income has been accentuated.

With income as a basis, it has been possible to divide the total population into six broad economic groups. The groups and the percent of the total population in each follow: wealthy, 0.6 percent; well-to-do, 1.8 percent; comfortable, 5.9 percent; moderate circumstances, 13.7 percent; minimum comfort, 35.7 percent; and subsistence and poverty, 42.3 percent.

Educational Implications²

Economic conditions affecting wealth and income make necessary courses in economics that will meet the needs of the average person. Such courses should stress actual conditions and trends rather than abstract theory and should provide an understanding of economic institutions and develop the ability to participate intelligently in the shaping of public policies.

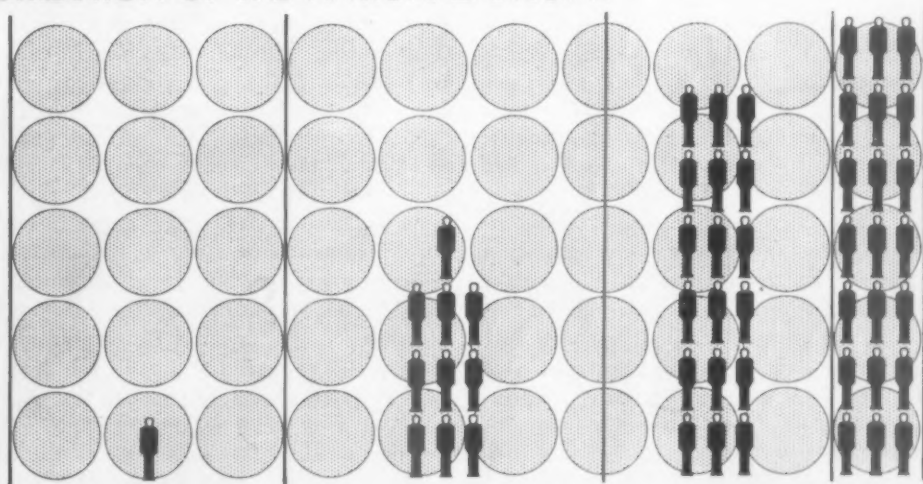
Schools also should assist the individual in the wise management of money and credit. The school may perform a definite service by stimulating public interest in problems affecting economic security. This may be done thru public meetings, the press, and the radio. Such problems as budgeting, credit, savings, and economical buying may be included. Children should be taught habits of thrift including wise purchasing of commodities, as well as the saving and investment of money.

It is obviously not the function of educators to prescribe how the national income should be distributed. However, an effective educational system helps men to move up the economic scale, to avoid the more congested occupations, and to apply intelligence to the business of earning a living. Unfortunately, the migration of unskilled and poorly trained workers from states where schools are poor and wages low tends to counteract the beneficial effects of excellent state school programs.

Fluctuations of the national income have had continuous, and often serious, effects upon school support. While school administrators will continue to profit from more efficient methods in budgeting and purchasing, there is need for stability in the income of education.

² For further educational implications consult: Carr, W. G. *School Finance*. School Economy Series. Stanford University, Calif.: Stanford University Press, 1933. 106 p. ¶ Douglas, Paul H. *Real Wages in the United States, 1890-1926*. Boston: Houghton Mifflin Co., 1931. 682 p. ¶ Kilpatrick, William H., and others. *The Educational Frontier*. New York: D. Appleton-Century Co., 1933. Chapter 2, "The Social-Economic Situation and Education," p. 32-72. ¶ National Education Association, Committee on the Economic Status of the Teacher. *Report*. Washington, D. C.: the Association. (In preparation.) ¶ National Education Association, Department of Classroom Teachers. *Economic Welfare of the Teacher*. Sixth Yearbook. Washington, D. C.: the Association, 1931. 244 p. ¶ National Education Association, Research Division. "Salaries in City School Systems, 1934-35," *Research Bulletin*, Vol. XIII, No. 2: March, 1935. (In preparation.) ¶ National Education Association and Phi Delta Kappa. *Evaluating the Public Schools*. Washington, D. C.: the Association, 1934. p. 37-44.

DISTRIBUTION OF THE NATIONAL INCOME



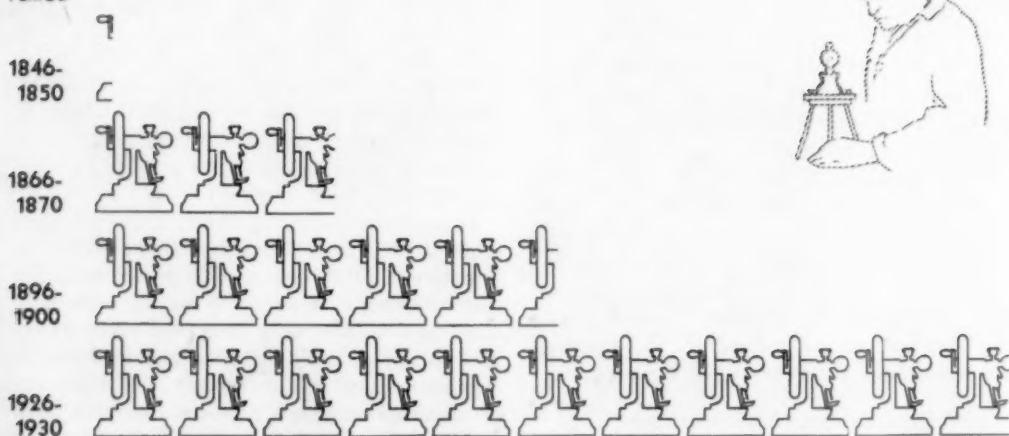
Each circle represents 2 percent of income in 1929

Each man represents 2 percent of the population

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PATENTS ISSUED

PERIOD



Each symbol represents 20 thousand patents issued

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IX. Invention and Discovery¹

Invention and discovery contribute to social change by creating a new environment to which man must adapt himself. Inventions may be mechanical or social. The radio is a mechanical invention; the sponsored radio program, a social invention. The social invention usually follows the mechanical invention and represents an effort to adjust to the new conditions that have been created. The delay between the invention or discovery and man's adaptation to it is called by sociologists "cultural lag." It is this lag that causes many social problems.

In recent years inventions and discoveries have increased rapidly. During the five-year period 1900-1905 there were 143,791 patents issued in the United States. In the five-year period ending in 1930 there were 219,384 patents. Further appreciation of the influence of inventions since 1900 is gained from a mere listing of a few outstanding achievements: airplane, oil-burning steamer, radio-telephone, television-photograph, tungsten lamp, gyrocompass, radio broadcasting, and radio-television. Findings in the fields of chemistry and natural science also have produced many economic and social changes. Among the important discoveries since 1900 are the following: cellophane, shatter-proof glass, adrenalin, insulin, and vitamins.

Ways of living today have been changed, not only by the foregoing, but by hundreds of inventions made prior to 1900 and put into widespread use since that date (e. g., the automobile, 1880-87; automatic telephone, 1887; moving pictures, 1892; X-ray, 1895). Under the influence of such inventions today life moves at a faster pace, ideas and customs tend to be standardized, and the general standard of living is higher than in 1900.

Perhaps the influence of invention can be made more striking by referring to the 150 social effects of the radio listed in *Recent Social Trends*. Among some of these new effects are the following: regional differences in cultures less pronounced, the penetration of city culture into villages and rural areas, the diffusion of culture between nations, the increased popularity of music, the revival of many old songs, the improvement of safety in air travel thru the radio beacon, the teaching of lessons to pupils, the dissemination of agricultural information to farmers, the speeding up of machinery for the detection of criminals, the bringing of church services to invalids, the employment of many artists for radio programs, the distribution of political information to voters, the elimination of rural isolation, and the provi-

¹ Based upon: Mumford, Lewis. *Technics and Civilization*. New York: Harcourt, Brace and Co., 1934. p. 53-54, 112, 221, 364-435. ¶ President's Research Committee. *Recent Social Trends*. New York: McGraw-Hill Book Co., 1933. Chapters 2 and 3. ¶ Beard, Charles A., and Beard, Mary R. *The Rise of American Civilization*. New York: Macmillan Co., 1930. Chapter 30.

sion of a creative outlet for youth in amateur broadcasting.

Under the strain of mechanical and social changes there has been considerable discussion of "the domination of 'the machine'" and "the growth of power." Mechanical developments have become to many a collective, personalized monster that destroys life, liberty, and the pursuit of happiness. It is true that the available horsepower per agricultural worker has increased from 2.5 in 1900 to 7.4 in 1930; that water power has increased sevenfold in the same period; that machines today supply the equivalent of 100 slaves per person. But it must be remembered that before the horse was domesticated man himself was the basic power unit. Gradually *thru invention* power was supplied by water, steam, and electricity. Freed from drudgery, men have been able to produce more, to live on a higher plane, to develop the arts, and otherwise to enrich the lives of larger numbers of people. Apparently the proper social use of the power, science, and technic developed by a machine age is the real problem to be settled.

Educational Implications²

One of the most obvious effects of new discoveries upon education is the rapid growth in knowledge. This fact accounts in no small part for the constant lengthening of the period of schooling. Courses have multiplied in number and content, and teachers have become increasingly more specialized. These tendencies, however, increase rather than diminish the necessity for a common area of civic, vocational, and cultural education. Such social integrating educational experiences are a necessity even in adulthood.

The rapidity of change means that even greater stress will be placed upon teaching youth to think in terms of principles and processes. Habits, routine learning, tradition, and authority will continue to prove inadequate guides in modern life. The aim of education must stress the development of adaptable personalities capable of making adjustments on the basis of changing individual and social needs.

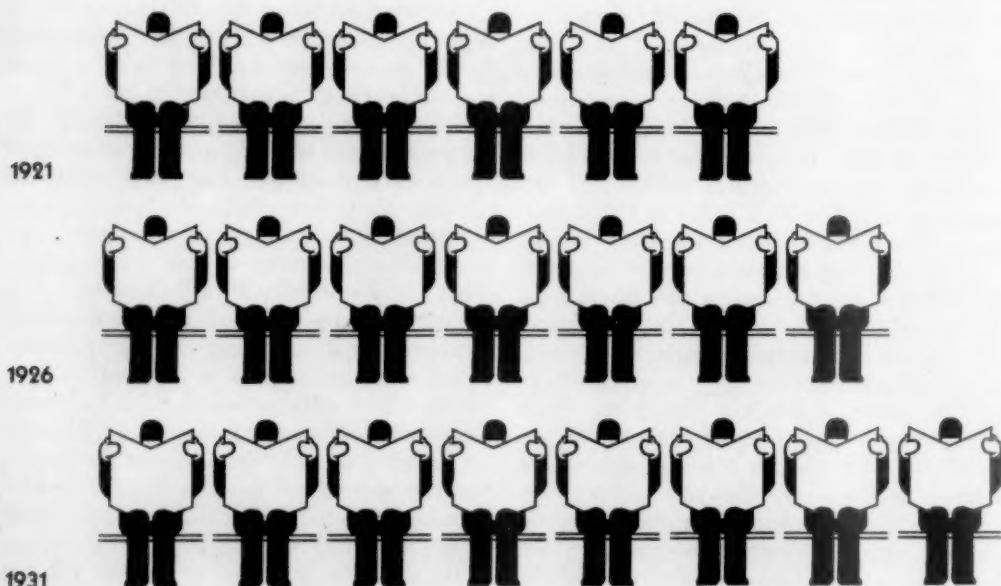
The enrichment of classroom activities thru the use of devices and inventions has lagged far behind practical scientific applications. Few schools have the visual aids to teaching which might be expected in a highly mechanized age. Recent improvements and lowered costs, however, have tended to increase the use of stereopticons, balopticons, and other devices for the projection of still pictures. Teachers have developed technics for using these machines, not only for commercially developed pictures, but to show to their classes the artistic and scientific achievements of individual pupils. That school systems will need to expand their libraries of flat pictures, motion picture films, and phonograph records in order to keep abreast of rapid changes, appears to be inevitable.

One of the most promising fields for extensive school development is the use of the laboratory method to study the nature of the learner and the learning process. One illustration may be taken from the studies that have been made of eye movements while pupils are reading. Thru the development of various devices it is now possible to photograph the eyes as they move across the printed page and to determine with exactness the movements and fixations. From these experiments it has been possible to discover faulty reading habits and to develop methods for teaching pupils to read fluently and efficiently. Another illustration is the experimental use of the phonograph to record oral speech. With the permanent records thus developed, teachers have been able to give careful study to speech difficulties. Equally important has been the possibility, thru these phonograph records, of enlisting the active interest of pupils in making improvements.

The foregoing examples merely touch upon the possibilities of research methods in education. The increase in use of these methods will require the training of a skilled personnel capable of dealing with the complexities of the learning process. It will mean also the transmission to each classroom teacher of sufficient appreciation of research so that he will know when to avail himself of the services of the specialist and how to utilize the findings in his daily activities.

² For further educational implications consult: Brown, C. K. "Education in Machine Utopia." *American Review* 3: 167-70; May, 1934. ¶ Bruce, G. V. "Energy; Hope of a Cultural Democracy." *Junior-Senior High School Clearing House* 8: 82-85; October, 1933. ¶ Chase, Stuart. *Men and Machines*. New York: Macmillan Co., 1929. 354 p. ¶ Dewey, John. *The Way Out of Educational Confusion*. Cambridge: Harvard University Press, 1931. 41 p. ¶ Judd, Charles H. *Education and Social Progress*. New York: Harcourt, Brace and Co., 1934. Chapter 10, "The Solution of Education Problems thru Scientific Studies," p. 229-76. ¶ Kilpatrick, William H. *Education for a Changing Civilization*. New York: Macmillan Co., 1927. 143 p. ¶ Merz, C. *The Great American Band Wagon*. New York: John Day Co., 1928. 263 p. ¶ Rugg, Harold O. *The Great Technology*. New York: John Day Co., 1933. 308 p.

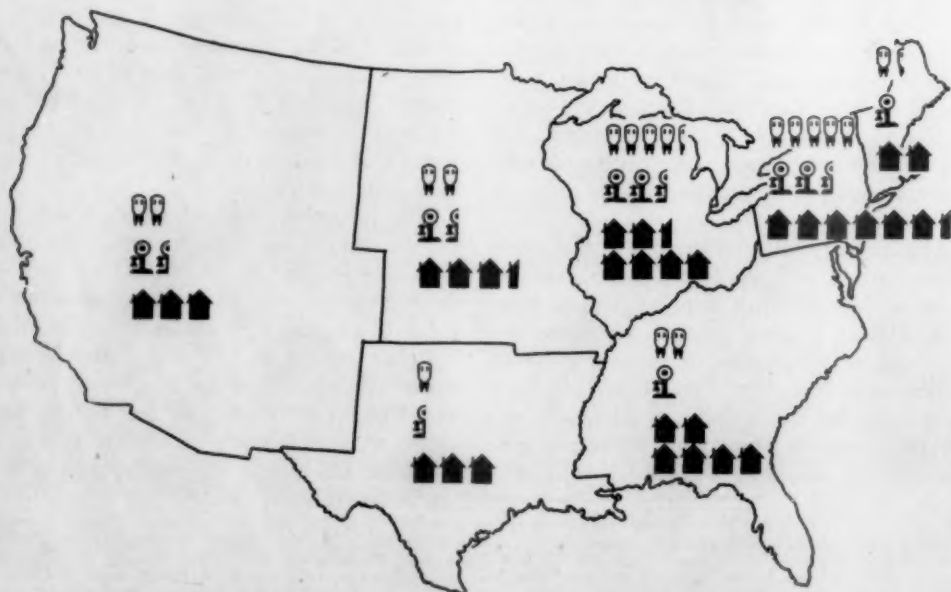
CIRCULATION OF DAILY NEWSPAPERS



Each symbol represents 5 million circulation

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TELEPHONES AND RADIOS PER FAMILY



Each symbol represents 1 million families, or telephones, or radios

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X. Communication¹

At the beginning of the century the established agencies in communication were the telegraph, the cable, and the postal service. To these have now been added the telephone, the radio, and television. By these means, and the recent development of newspapers, periodicals, news agencies, and the motion pictures, isolation has been broken down, distance annihilated, and cultural patterns changed.

In 1900 postal delivery service was supplied in 796 cities; in 1931, in 3,098 cities. Rural free delivery, established in 1896, served 6,890,687 families in 1931. The total number of telegraph messages doubled between 1902 and 1927, while the population increased about 62 percent. Wireless messages transmitted by commercial companies grew in number from 154,617 in 1907 to 3,777,538 in 1927. Amateur wireless stations increased from 1,228 in 1913 to 18,994 in 1930.

The most spectacular development has been that of the telephone system. In 1900 there were 1,355,911 telephones in the United States. In 1930 there were 20,201,576. To many persons the telephone is a necessity, and failure to have one carries with it a peculiar type of isolation. Between 1902 and 1927 the aggregate number of calls multiplied sixfold, or to a total of over 29 billion. The growth in per capita calls increased from 64 in 1902 to 246 in 1930.

The number of daily newspapers declined from 2,514 in 1917 to 2,268 in 1931, or about 10 percent, due largely to consolidations, but circulations have increased steadily. The growth of the number of cities with only one newspaper has increased from 353 in 1900 to 913 in 1930.

One of the most effective agencies for mass

impression is the radio. In 1932 the estimated number of receiving sets in the country was over 16,000,000. The daily audience is estimated at 37,000,000 persons. In influence upon social attitudes and public opinion, the radio's nearest rival is probably the motion picture, with 100 million in weekly attendance.

Educational Implications²

The improvement of communication offers possibilities for the enrichment of education. In time, the radio will bring to every classroom the voices of statesmen, the languages of foreign nations, and descriptions of events of worldwide significance. Even today the radio places hundreds of children at one time under the instruction of master teachers and brings many small schools the musical satisfactions of great symphony orchestras. It appears probable that these contacts will increase in number and value. Pupils and teachers in many communities and countries could thus exchange experiences and discuss their mutual problems.

But if the levels of culture and ideals are to be advanced, education has still another important responsibility in connection with communication facilities. The ease and rapidity with which impressions may be spread place a dangerous tool in the hands of political demagogues, cranks, and unscrupulous advertisers. Students must be taught to read their newspapers with caution, to evaluate news reports, and to check important facts by consulting several dependable sources of information. The type and quality of radio programs must be studied and discriminating tastes developed. Propaganda in every form must be scrutinized so that it may be known for what it is, and appropriately handled in the educational program.

¹ Based upon: President's Research Committee. *Recent Social Trends*. New York: McGraw-Hill Book Co., 1933. Chapters 4 and 8. ¶ Ogburn, William F. *Social Changes in 1929*. Chicago: University of Chicago Press, 1930. p. 991-1001.

² For further educational implications consult: Charters, W. W. *Motion Pictures and Youth: A Summary*. New York: Macmillan Co., 1933. 66 p. (Combined with *Getting Ideas from the Movies*, by Perry W. Holaday and George D. Stoddard, 102 p.) ¶ Darrow, Benjamin H. *Radio, the Assistant Teacher*. Columbus, Ohio: R. G. Adams and Co., 1932. 271 p. ¶ Devereux, Frederick L., and others. *The Educational Talking Picture*. Chicago: University of Chicago Press, 1933. 222 p. ¶ Dewey, John. *Democracy and Education*. New York: Macmillan Co., 1916. 434 p. ¶ Forman, Henry J. *Our Movie Made Children*. New York: Macmillan Co., 1933. 288 p. ¶ Freeman, Frank N., and others. *Visual Education*. Chicago: University of Chicago Press, 1924. 391 p. ¶ Koon, Cline M. *The Art of Teaching by Radio*. U. S. Dept. of the Interior, Office of Education, Bulletin, 1933, No. 4. Washington, D. C.: Government Printing Office, 1933. 92 p. ¶ Morgan, J. E. "National Culture—By-Product or Objective of National Planning." *School and Society* 40: 111-17; July 28, 1934. ¶ National Education Association. *Report of the Committee on Propaganda in the Schools*. Washington, D. C.: the Association, 1929. 47 p. ¶ National Education Association, Department of Elementary School Principals. *Aids to Teaching in the Elementary School*. Thirteenth Yearbook. Washington, D. C.: the Association, 1934. 416 p. ¶ Orton, William A. *America in Search of Culture*. Boston: Little, Brown and Co., 1933. Chapter 13, "Destiny Listening In," p. 244-64. ¶ Overstreet, Harry A., chairman. "To What Extent Does Radio Broadcasting in the United States Need Public Regulation?" Panel Discussion. *Journal of Adult Education* 6: 278-85; June, 1934. ¶ Peter, C. C. "Relation of Motion Pictures to Standards of Morality." *School and Society* 39: 414-15; March 31, 1934. ¶ Rutherford, G. W. "Radio as a Means of Instruction in Government." *American Political Science Review* 27: 264-73; April, 1933. ¶ Sapir, Edward. "Communication." In *The Encyclopedia of the Social Sciences*. Vol. IV. New York: Macmillan Co., 1931. p. 78-80.

XI. Transportation ¹

Modes of transportation have been one of the important influences in the development of the American people. The characteristic isolation of sections of the country prior to 1800 was swept away by the development of the steamboat and the railroad. Agriculture and industry were revolutionized, and migration streamed westward to round out the continent. Within the twentieth century the street railway, the automobile, and the airplane have increased mobility, convenience, and social contacts. Urban and rural communities have been brought so close together as to increase the possibility of larger governmental units.

The period of great railroad development preceded and immediately followed the Civil War. In 1900 there were 193,346 miles of track, and in 1930 a total of 249,052. Between 1900 and 1920 the total number of passengers carried doubled. Since that time there has been a gradual decline, chiefly because of competition with the automobile.

Compulsory registration of motor vehicles became nationwide in 1913. At that time there were about one million passenger cars as compared with 22,366,313 in 1931. The total number of miles of highway in 1904 was 2,151,379;

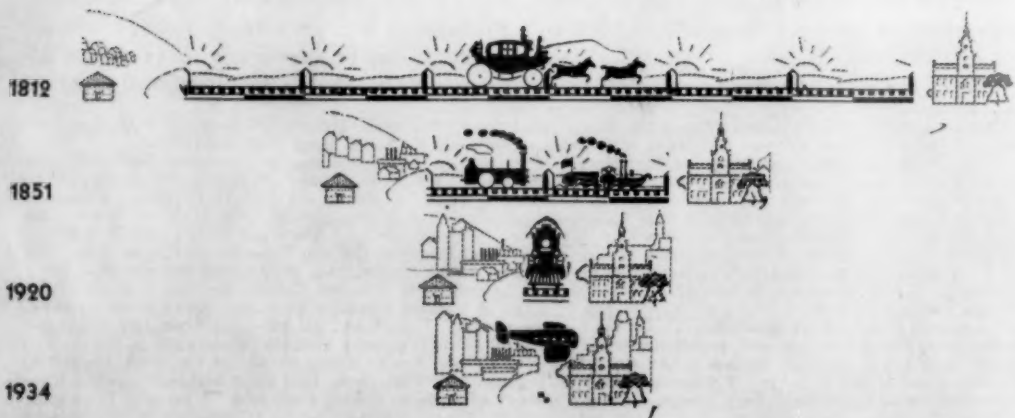
by 1930 it had increased 40 percent to 3,009,066. Surfaced roads increased in the same period from 153,645 to 693,559 miles. Today the per capita mileage traveled in passenger automobiles (2,697 miles) is twelve times the per capita mileage traveled on steam railroads.

While the airplane has not yet become a common carrier for most people, the development of the air mail and the speeding up of communication are significant general influences. In 1926, passenger air service covered 3,715 miles. By 1931 it had been extended to 45,704 miles. The number of passengers increased from 5,782 in 1926 to 522,345 in 1931. Air mail routes were extended from 4,713 miles in 1927 to 23,488 in 1931. Today the American people are sending annually about a hundred million pieces of mail by the air routes.

The rush of the various modes of transportation to cover the field has often resulted in competition and duplication of equipment. A recent trend has been toward an improvement of services by consolidation and integration. In 1925 the steam railways operated only 375 buses as compared with 1,759 in 1930. Street railways are utilizing buses to reach new suburban areas and sections where electrical cars

¹ Based upon: President's Research Committee. *Recent Social Trends*. New York: McGraw-Hill Book Co., 1933. Chapter 4. ¶ Osburn, William F. *Social Changes in 1929*. Chicago: University of Chicago Press, 1930. p. 991-1001. ¶ Beard, Charles A., and Beard, Mary R. *The Rise of American Civilization*. New York: Macmillan Co., 1930. p. 636-40. ¶ National Automobile Chamber of Commerce. *Automobile Facts and Figures*. New York: the Chamber, 1934. 96 p.

TRAVEL TIME FROM PITTSBURGH TO PHILADELPHIA



Each square equals 1 hour

Each milestone equals 24 hours

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are impractical. The cooperation of steam railways and airplanes has shortened transcontinental transportation to a matter of hours. The problem of rapid transportation for short distances within congested metropolitan areas demands further ingenuity in the integration and improvement of existing facilities.

Educational Implications²

Improvements in transportation have contributed to the enrichment of education. It is possible to send books, supplies, and equipment more rapidly into isolated areas. Trained teachers are willing now to go into communities which formerly were unattractive because of inaccessibility. Modern systems of highways and improved motor buses make it possible to bring children to better schools. Educators are better able to meet together in conventions, to observe personally promising school activities, to attend colleges for advanced study, and to work together cooperatively on mutual problems. School children are able quickly to exchange letters, pictures of local scenes, samples of re-

gional products, and other aids which introduce reality into the classroom.

Improved transportation has also tended to accelerate the demand for larger units of school, as well as for larger units of governmental administration. Administrators and specialists are able to cover a wider area with ever greater effectiveness. It may be expected also that enlargement of the unit of administration will be accompanied by a trend toward larger units for taxation. There is at present a definite shifting of school support from small local districts to the state, and the necessity of federal support is urged by many.

Cheaper and more rapid transportation offers many possibilities for teacher training thru travel. Teachers who have visited foreign lands will be able to bring their pupils a clearer understanding of the characteristics, aspirations, and interdependence of various peoples. The exchange of students, instructors, and educational literature should contribute much to international goodwill and to the improvement of educational technics.

² For further educational implications consult: Boutwell, William D. "Going Places." *National Education Association Journal* 23: 79-82; March, 1934. ¶ Covert, Timon. *Larger Units for Educational Administration—A Potential Economy*. U. S. Dept. of the Interior, Office of Education, Pamphlet No. 45. Washington, D. C.: Government Printing Office, 1933. 43 p. ¶ Deffenbaugh, Walter S., and Covert, Timon. *School Administrative Units*. U. S. Dept. of the Interior, Office of Education, Pamphlet No. 34. Washington, D. C.: Government Printing Office, January, 1933. 25 p. ¶ Farnsworth, B. K. "State Policies Relating to Pupil Transportation." *Nation's Schools* 13: 19-22; February, 1934. ¶ Morphet, E. L. "Influence of Roads on Transportation and Consolidation." *American School Board Journal* 84: 53; June; and 85: 64; August, 1932. ¶ National Education Association, Department of Superintendence. *Critical Problems in School Administration*. Twelfth Yearbook. Washington, D. C.: the Association, 1934. 384 p. ¶ National Education Association, Research Division. "The Outlook for Rural Education." *Research Bulletin* 9: 229-304; September, 1931. Washington, D. C.: the Association. ¶ Rothschild, John. "The Revival of Travel." *Progressive Education* 11: 311-16; April-May, 1934.

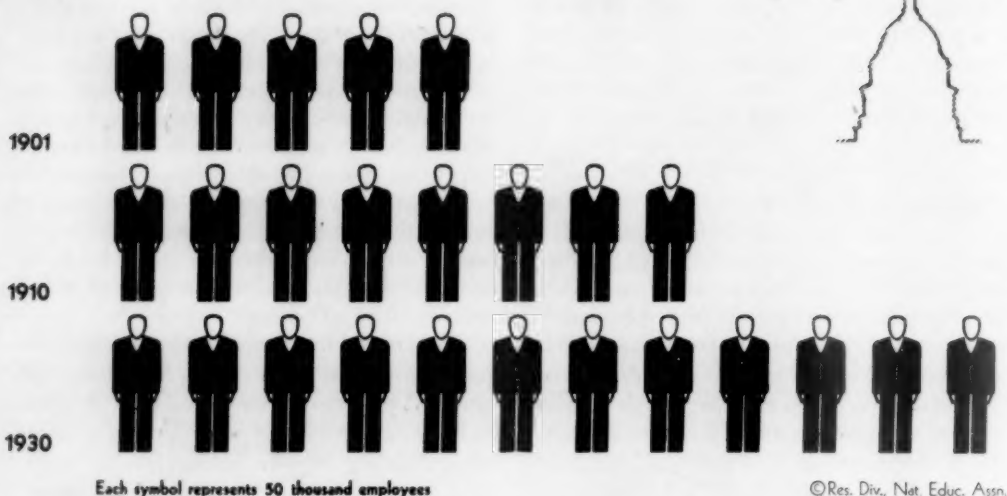
PASSENGER AUTOMOBILE REGISTRATIONS



Each symbol represents 2,500,000 cars

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EMPLOYEES IN FEDERAL EXECUTIVE SERVICE



XII. Government ¹

Changes in government have come so rapidly in recent years that it is difficult to tell to what extent some of the present practises are to become permanent in character. However, in the changes over a number of years, two definite trends are discernible: the increase in number of governmental functions and the growth in centralization.

The increase in governmental functions has arisen because of such economic and social needs as are discussed in this bulletin. Increased federal activities may be illustrated by the creation of federal boards to deal with various problems: Reserve Board (1913), Trade Commission (1914), Tariff Commission (1914), Power Commission (1920), Radio Commission (1927), and the Farm Board (1929). The new boards and commissions created to meet the present economic crisis are too numerous to mention here. Increased state activity in social problems is shown by the following facts. In 1900 there were 2 state civil service commissions, and 11 in 1930; in 1923, one state had an old-age pension law, compared with 17 in 1931; in 1911 there were 5 state workmen's compensation acts and in 1931 there were 44. In county and other local affairs there has been some loss in the number of functions

because of the shifting of responsibilities to the state. At the same time, local governments have tended to spend more money on the activities retained.

Increased governmental activity is also indicated by the total expenditures, altho this change reflects in part the fluctuations in the purchasing power of money and increases in the population. Only a few examples will be given. The federal expenditures (in current dollars) for agricultural experimental stations increased almost fourfold between 1915 and 1930, and, in the same period, costs for extension work multiplied 15 times. State expenditures (in 1915 dollars) for highways increased almost sixfold between 1915 and 1929; for education and libraries, twofold; for recreation, fourfold; and for conservation of natural resources, twofold. Costs of government in cities over 30,000 in population increased 90 percent (in 1915 dollars) between 1915 and 1929.

The increase in federal and state functions and the shifting of responsibilities to larger units have been accompanied by some centralization of authority. The granting of federal funds to the states for highways, for vocational education, and recently for relief purposes has

¹ Based upon: President's Research Committee. *Recent Social Trends*. New York: McGraw-Hill Book Co., 1933. Chapters 25, 27, and 29. ¶ White, Leonard. *Trends in Public Administration*. Recent Social Trends Monograph. New York: McGraw-Hill Book Co., 1933. p. 11. ¶ Wooddy, Carroll H. *Growth of the Federal Government, 1915-1932*. Recent Social Trends Monograph. New York: McGraw-Hill Book Co., 1934. 577 p.

been accompanied by certain requirements. States have also increased their direction of local governments in finance, education, highways, and welfare. This tendency has gone so far that there is a demand to abolish local governments, particularly the counties, by establishing the state as the unit for public administration.

Educational Implications²

The school curriculum at all levels must include social studies courses that approach critically the essential problems of living together, which are also the problems of government. Accepted institutions of government should be studied from the point of view of their efficiency in existing situations. Interest in public administration should be stimulated and well-trained young Americans encouraged to seek in governmental activities a life work that offers opportunity for personal satisfaction and for social service. Institutions of higher education will need to enlarge and to enrich the courses offered advanced students in the field of government.

Adult education classes, discussion groups, and forums for the study of governmental problems, if organized extensively, will help to overcome civic apathy. With an understanding of current problems will come a cooperation in their solution—a unity of purpose that can be obtained in no other way.

Reorganization of school administration on the basis of larger units will logically follow the strengthening of state government at the expense of local government. Educators must be alert to safeguard essential values in the process of such centralization. They need also to be constantly on guard against the results of pressure brought on state legislatures to procure the passage of school legislation representing the interests of special groups.

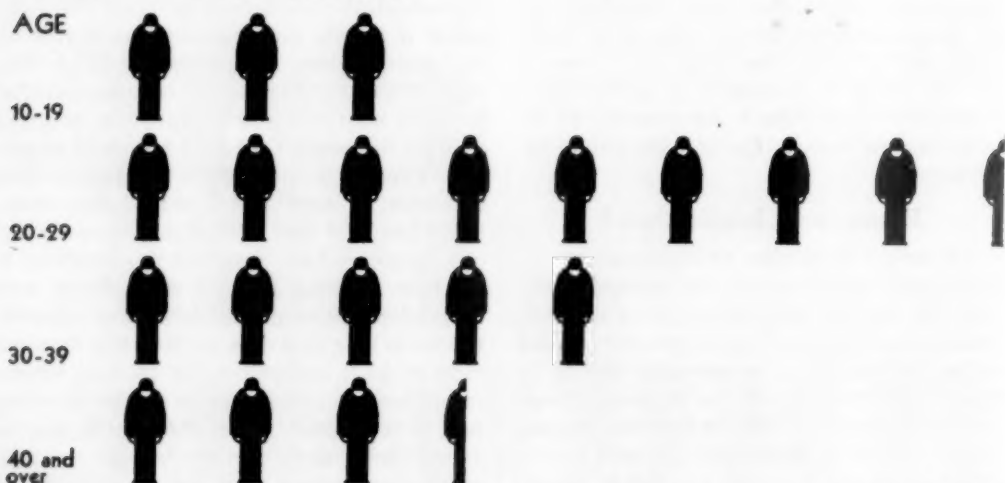
Of the critical problems which arise from the centralization tendencies in governmental structure one is the relationship which should

exist between education and government. It has been clearly recognized for years that education is a state function and that boards of education act under state authority. While this state authority does exist, the common practise has been for direct administration to be exercised by the people thru local boards of education. There is genuine danger that further concentration of powers of direct administration in the hands of state officials may seriously impair local initiative. To offset this condition it has been proposed that the state should seek to develop efficiency and economy in administration so long as it does not interfere with the right of local communities to conduct experiments looking to an increase in the effectiveness of instruction. State officers will tend to extend their control over external matters such as the determination of the acceptability of school building plans, the type of financial accounting to be employed, the sort of reports to be made, and the safeguards to be provided for school funds. At the same time there will probably continue to exist local variation in curriculums, in methods of teaching, and in the organization of schools.

Another aspect of the relation of education to changing governmental structure lies in the realm of local affairs. Some students of government recommend that school authority, particularly in financial matters, should be centralized in the local government. If this step were taken, it might mean the decline of boards of education. Other political scientists, educators, and many citizens are equally certain that the independent board of education has clearly demonstrated its usefulness, particularly in its usual freedom from political control and corruption. While it is true that there is no good reason for maintaining many of the very small school administrative areas, educators will need to be alert to preserve the desirable conditions which have developed when the schools are independent of general local governmental authority.

² For further educational implications consult: American Historical Association, Commission on the Social Studies. *Conclusions and Recommendations*. New York: Charles Scribner's Sons, 1934. 168 p. ¶ Ascher, Charles. "Political Education." In *Handbook of Adult Education in the United States*. New York: American Association for Adult Education, 1934. p. 146-51. ¶ Judd, Charles H. *Education and Social Progress*. New York: Harcourt, Brace and Co., 1934. Chapter 6, "Lay Management and Professional Management of Schools," p. 128-51. ¶ Kilpatrick, William H., and others. *The Educational Frontier*. New York: D. Appleton-Century Co., 1933. p. 213-56. ¶ Merriam, Charles E. *Civic Education in the United States*. Part VI, Report of the Commission on the Social Studies, American Historical Association. New York: Charles Scribner's Sons, 1934. 196 p. ¶ National Council for the Social Studies. *The Social Studies Curriculum*. Fourth Yearbook. Philadelphia: McKinley Publishing Co., 1934. 227 p. ¶ National Education Association, Department of Superintendence. *Critical Problems in School Administration*. Twelfth Yearbook. Washington, D. C.: the Association, 1934. Chapters 1, 2, 3, 4, and 9. ¶ National Education Association, Department of Superintendence. *Social Change and Education*. Thirteenth Yearbook. Washington, D. C.: the Association. (Available in February, 1935.)

ARRESTS BY AGE GROUPS



Each man represents 5 percent of arrests reported to federal government, 1933

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XIII. Crime and Punishment¹

Statistics on crime and juvenile delinquency in the United States lack uniformity, accuracy, and completeness. It is, therefore, difficult to determine the full significance of present trends. Existing evidence does indicate a gradual increase of anti-social and illegal behavior as a result of many factors working together. A large portion of those arrested for crime are young men.

The number of laws defining and punishing criminal acts is increasing at the average rate of about 2 percent a year. Most of these enactments since 1900 have dealt with the health, safety, morals, and economic interests of the public and the conservation of natural resources. As a result, crimes against property and persons have declined in relative number. The invention of the automobile has brought with it unlawful acts of theft, of interstate transportation, and of street traffic. The regulation of liquor, drugs, and narcotics has increased further the possibility of violations of the law.

Because of changes in the law, and for numerous other reasons, there has been an apparent increase in the number of young criminals.

Today about 50 percent of the arrests reported to the federal government are for persons under 30 years of age, and 20 percent are for those under 21 years. A study made of the 240,871 persons whose fingerprint records were filed in 1933 with the U. S. Department of Justice revealed 15 percent as 15-19 years of age and 24 percent as 20-24. Between the ages of 15 and 34 the percent of arrests is roughly twice the proportion that these age groups are of the total population.

The number of juvenile delinquents brought before courts was about 200,000 in 1928. Recent reports to the Children's Bureau indicate that the number of court cases is declining steadily in spite of widespread economic maladjustments. This trend may be due to the increasing practise of handling juvenile cases without formal court procedures or to the preventive work of the schools, social agencies, and police departments.

A serious development has been the increase in organized crime. Gangsters and racketeers engage in crime for profit as members of efficiently operated groups. Aided by the automobile and excellent highways, criminal gangs

¹ Based upon: National Commission on Law Observance and Enforcement. *Report on Criminal Statistics*, 205 p.; *Report on the Child Offender in the Federal System of Justice*, 175 p.; *Report on the Causes of Crime*, Vol. I, 390 p.; and other reports in this investigation. Washington, D. C.: Government Printing Office, 1931. ¶ President's Research Committee. *Recent Social Trends*. New York: McGraw-Hill Book Co., 1933. Chapter 22. ¶ Gillette, John M., and Reinhardt, James M. *Current Social Problems*. New York: American Book Co., 1933. Chapters 27 and 28. ¶ U. S. Department of Labor, Children's Bureau. *Juvenile Court Statistics: 1931*. Washington, D. C.: Government Printing Office, 1933. 62 p.

extend their operations into small towns and rural communities. Alliances have sometimes developed in large metropolitan areas between the racketeer, the police, and public officials. Partly as a result of this condition there is an increased participation of state and federal agencies in police work.

The recent application of scientific knowledge and methods to the problems of crime is significant. Police departments are availing themselves of fingerprint technics, chemical analyses, automobiles, radios, teletypes, and other specialized aids. Court procedure has been altered by the methods of psychology, psychiatry, medicine, and social work. Courts and prison officials are influenced by these sciences in their use of probation and parole, and in the social readjustment of offenders.

Educational Implications²

The school should be able to influence many of the environmental factors associated with criminality and delinquency. Research has indicated that the teacher in the classroom influences significantly the attitudes, ideals, and prejudices of pupils. A modern and socially useful curriculum properly adjusted to individual needs is important. The guidance of special aptitudes, hobbies, and recreational interests thru extracurriculum activities must be enriched in spite of the criticism of "fads and frills." Equipment and personnel to diagnose physical and mental disabilities need to be extended so as to reach every child. Cooperative efforts between the teacher, the parents, and various constructive community agencies must be made so effective as to prevent or to remedy tendencies toward anti-social conduct.

Recently public schools have placed new emphasis upon the development of character. In some instances, increases in the amount and the quality of direct moral instruction have been tried. One of the most promising ap-

proaches has been the thoro study of child nature and needs, followed by a complete readjustment of class management, school administration, and instructional activities. In short, every aspect of school life has been required to contribute constructively to the development of wholesome personalities.

One great need is for the coordination of the efforts of the school with those of other public agencies, such as the juvenile court officers, social workers, health authorities, and police. Exact and complete records covering the entire school life of each child are necessary. Disintegrating factors, such as slum and other delinquency areas, should be studied to determine the possibility of improving conditions thru school activities and public opinion.

The foregoing educational trends are possibly but parts of a future comprehensive social program thru which society will assume a more active interest in the welfare of children and of young people. The *Children's Charter*, with its demand for more wholesome communities, simply emphasizes what is known about the formation of ideals and attitudes. Even excellent schools are rendered less effective by grossly anti-social motion pictures, radio programs, magazines, newspapers, and other unwholesome influences of the typical community.

With employment opportunities for youth becoming less abundant, society must choose between allowing its young people to drift or directing their energies into activities which are individually and socially worthwhile. Are they to be transported to camps and employed at public works? Are they to be sent to specialized semi-penal institutions as foreign countries have been forced to do with their "wild" boys? Are they to be given an opportunity for continuing until maturity under publicly financed educational programs which will develop their individual potentialities while conserving the values of home and community life?

² For further educational implications consult: Copeland, Royal S. "Crime and a Revised National Policy in Education." *Educational Record* 15: 275-83; July, 1934. ¶ Copeland, Royal S. "Education and Prevention of Crime." *Official Report*. Washington, D. C.: Department of Superintendence, National Education Association, 1934. p. 79-88. ¶ Heaton, Kenneth L. *The Character Emphasis in Education*. Chicago: University of Chicago Press, 1933. 415 p. ¶ Hubbard, Frank W. "Who Is the Criminal, Society or the Individual?" *National Education Association Journal* 22: 128-29; April, 1933. ¶ Lawes, L. E. "The Challenge to the School." *Proceedings*, 1932, Vol. 70, Washington, D. C.: National Education Association, 1932. p. 57-60. ¶ National Education Association, Research Division. "Crime Prevention thru Education." *Research Bulletin* 10: 137-201; September, 1932. ¶ National Education Association, Research Division. "Education for Character; the Social and Psychological Background." *Research Bulletin* 12: 40-80; March, 1934. Also, "Education for Character; Improving the School Program." *Research Bulletin* 12: 85-141; May, 1934. ¶ Neumann, Henry. *Lives in the Making*. New York: D. Appleton and Co., 1932. 370 p. ¶ Thom, Douglas A. *Normal Youth and Its Everyday Problems*. New York: D. Appleton and Co., 1932. 368 p. ¶ Thrasher, F. M. "Juvenile Delinquency and Crime Prevention." *Journal of Educational Sociology*, 6: 500-509; April, 1933.

XIV. Public Finance ¹

No other trends in modern American life interest us so much as those that touch our pocketbooks. The American citizen, therefore, has a keen interest in changes affecting the burdens imposed by taxation and he is making that interest felt by membership in tax leagues, taxpayers' strikes, and similar activities.

The aggregate tax bill increased 355 percent between 1913 and 1930. Of this increase (in current dollars) 80 percent is attributable to the expenses of four governmental functions. Nearly 28 percent of the increase is accounted for by war costs; education accounts for about 21 percent; rural highways, for 18 percent; and municipal functions other than education, for 13 percent.

With the increase have come shifts in sources of tax receipts and in the distribution of the tax burden. Twenty years ago public revenue was derived almost entirely from the general property tax, excise taxes on liquor and tobacco, and customs duties. By 1930 the income tax had become established as a leading source of revenue, and excise taxes had declined in relative importance. The sudden decrease in revenue from the income tax and general property tax, due to the depression, has been followed by the adoption or the extension of excise taxes such as those on tobacco, gasoline, electricity,

and alcoholic beverages.* These taxes are in many cases imposed both by the federal government and by the states.

The present trend toward larger units of governmental administration may relieve the tax situation in cases where shifting population, a small tax base, or tax delinquency makes it impossible for the local unit to function adequately. Federal and state aid and the sharing of tax revenues by state and local government are present attempts to handle the problems.

There is apparently a growing demand for a reorganization of our tax system so as to stabilize governmental income and to coordinate federal, state, and local taxation, with larger units, equitable distribution, and competent administration.

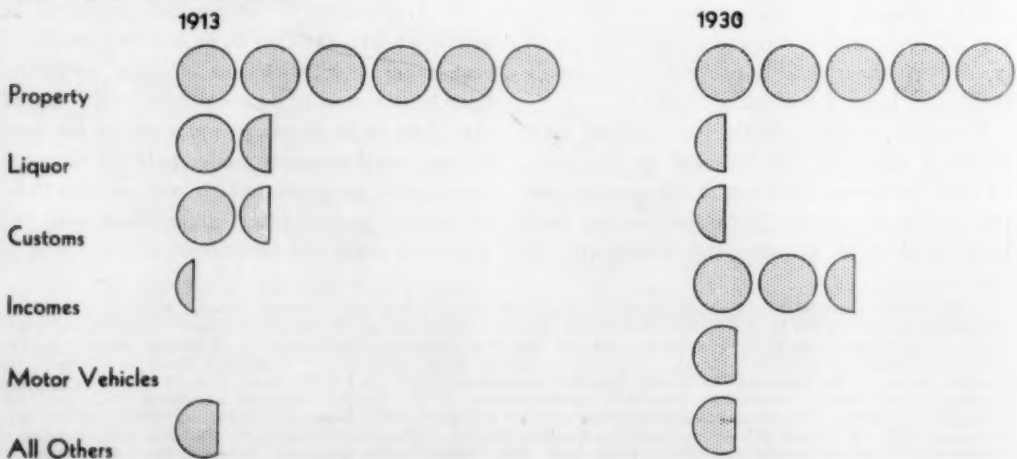
Educational Implications ²

The failure of the existing tax systems to provide adequately for education was brought into sharp focus by the current economic depression. In many states, communities with small resources found themselves unable to meet the costs of schools thru local taxation. This condition was not, of course, wholly the result of the depression. In many cases rapid changes in population or in tax resources had already brought about the necessity for partial

¹ Based upon: President's Research Committee. *Recent Social Trends*. New York: McGraw-Hill Book Co., 1933. Chapters 7, 25, and 26. ¶ U. S. House of Representatives, Committee on Ways and Means. *Double Taxation*. Washington, D. C.: Government Printing Office, 1933. 328 p.

² See page 277 for footnote.

SOURCE OF TAXES



Each circle represents 10 percent of total amount collected

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state support. But the financial crisis served to emphasize the fact that school finance is no longer a strictly local problem. Some of the ways in which adjustments have been made are the enlarging of school districts with accompanying economies in administration, state contributions to school support, either by equalization funds or other forms of state aid, or by specially allotted taxes, and grants from the federal government, most recently thru the Federal Emergency Relief Administration.

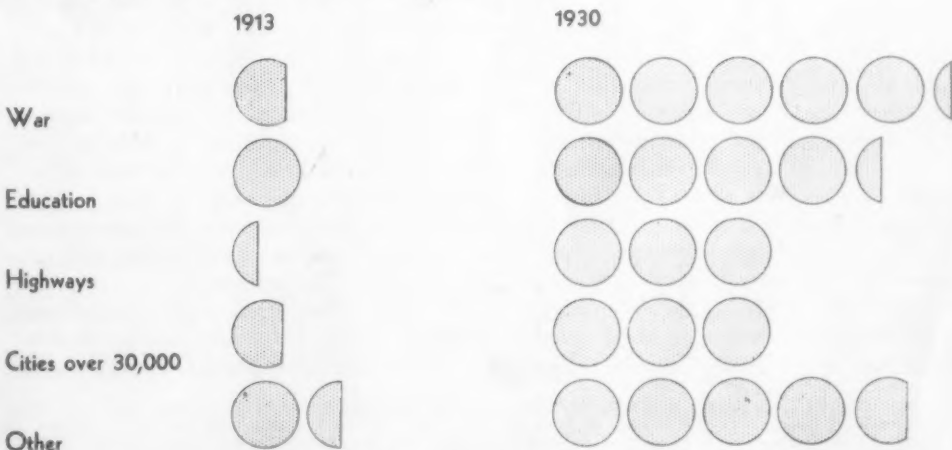
It appears that the schools will draw their support from much larger units of taxation in the future than in the past. There is an increasing tendency to utilize personal and corporation income taxes, general sales taxes, and chain store taxes for the purpose of state school support. But many state tax systems need extensive reorganization to insure financial stability of school funds, equitable distribution of the costs, and reasonable educational opportunities for all children. On the other hand, there rests upon educators the obligation to organ-

ize and to direct their schools more efficiently.

One lesson arising from recent economic difficulties is that citizens often hold attitudes toward taxes which are at best only partly correct. It is common for people to feel that tax payments are contributions for which the taxpayer receives nothing in return. Actually, however, taxation is the method by which citizens in our democracy purchase collectively essential services which they could rarely afford as individuals. There is, obviously, a responsibility resting upon education to help youth and even adults to understand the essentials of taxation. What types of taxes are levied in the local community and in the state? How does the typical citizen pay his taxes? What proportion of the individual's tax payments are utilized for police and fire protection, for schools, and for the other activities of government? How were these essential services paid for during the early years of the nation? These questions are but a few of those which might be discussed more widely in the classroom and in public forums.

² For further educational implications consult: Carr, William G. *School Finance*. School Economy Series. Stanford University, Calif.: Stanford University Press, 1933. 106 p. ¶ Judd, Charles H. *Problems in Education in the United States*. Recent Social Trends Monograph. New York: McGraw-Hill Book Co., 1933. Chapter 6, "Problems of Finance," p. 138-68. ¶ Lutz, Harley L., and Carr, William G. *Essentials of Taxation*. Suggestions for Study Groups. Washington, D. C.: National Education Association, 1933. 14 p. ¶ Mort, Paul R. *State Support for Public Education*. National Survey of School Finance, Office of Education, U. S. Dept. of the Interior. Washington, D. C.: American Council on Education, 1933. 406 p. ¶ National Education Association, Department of Superintendence. *Critical Problems in School Administration*. Twelfth Yearbook. Washington, D. C.: the Association, 1934. Chapter 3, "The Financial Support of Public Education." ¶ National Education Association, Research Division. "Five Years of State School Revenue Legislation, 1929-1933." *Research Bulletin* 12: 1-40; January, 1934. ¶ National Education Association, Research Division. *School Revenues and New Methods of Taxation*. Studies in State Educational Administration, No. 2. Washington, D. C.: the Association, January, 1930. 12 p. Also in the same series: *The Corporation Income Tax and Its Relation to School Revenue Systems*, August, 1932. 20 p. ¶ National Education Association and Department of Superintendence, Joint Commission on the Emergency in Education. *Report of National Conference on the Financing of Education*. Washington, D. C.: the Association, 1933. 78 p. ¶ National Tax Association. "Second Report on a Plan of a Model System of State and Local Taxation." *Proceedings*, 1933. Columbia, S. C.: the Association, 1934. p. 353-420.

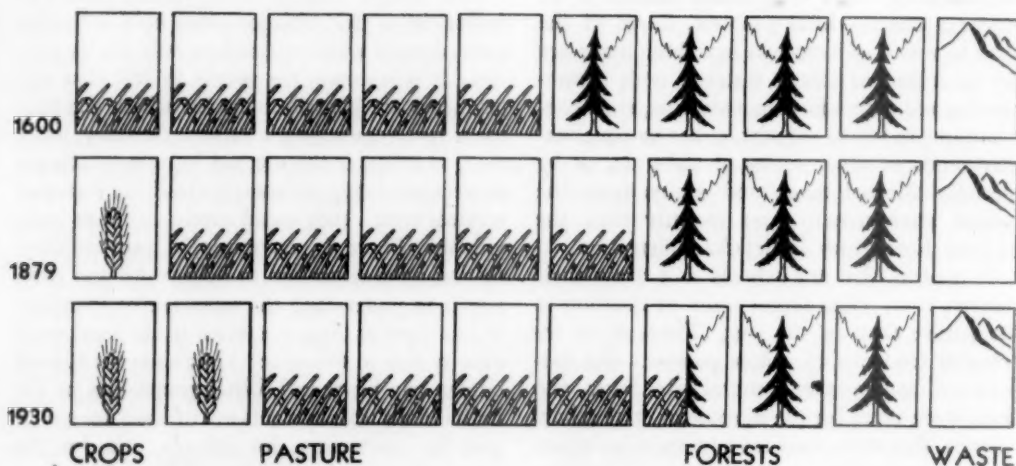
DISTRIBUTION OF TAX COLLECTIONS



Each circle represents 500 million dollars

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LAND UTILIZATION



Each symbol represents 200 million acres

©Res Div, Nat Educ Assn

XV. Natural Wealth ¹

The natural wealth of the United States consists of minerals, power resources, agricultural lands, and forests. The use made of these resources affects the economic life of the country and the standard of living. Altho our natural endowment is a generous one, there has been increasing interest in its proper use and the possibilities of its exhaustion.

In the field of mining the problem is not one of absolute exhaustion, but of future increase in cost thru depletion of the richer and more accessible deposits. The supplies of iron ore are sufficient for many decades, yet a leading authority forecasts a decline in the rich Lake Superior ores within twenty years. Reserves of copper, tho still great, are so far depleted that some of our most famous districts can no longer compete with the newer mines of Africa. Crude oil reserves, according to expert estimates, are about 30 percent exhausted, tho fortunately chemists have now found ways to recover both gasoline and lubricants from oil shale and from coal. Reserves of coal are enormous, nominally sufficient to last 4,000 years at the present rate of production. Yet in coal mining also a period of increasing cost is anticipated, hastened by the present spendthrift ex-

ploitation of the richer deposits. In the anthracite mines, costs are already increasing and the same condition in many of our finest bituminous fields is only a matter of time. To a country more dependent than any other upon cheap metal and fuel, the conservation of mineral resources is a major national concern.

The lines of attack in combatting the effects of mineral depletion are the prevention of waste in mining—which is still very large—the improvement of methods and machinery, and economies in use. Slackening of population growth will retard the present increase in consumption, and recovery of scrap will create a working capital of metal, which is used over and over again, increasing with the years and thereby reducing the drain upon the mines. By these and other means, the engineers hope to offset the effects of depletion. At the same time, exhaustion of the more accessible deposits has already forced a migration to newer fields. These shifts have significant influences upon the housing, cultural opportunities, and economic status of the workers.

The early policy of the federal government of selling arable lands for revenue depleted the timber and mineral lands by the end of

¹ Based upon: Gillette, John M., and Reinhardt, James M. *Current Social Problems*. New York: American Book Co., 1933. p. 55-75. ¶ President's Research Committee. *Recent Social Trends*. New York: McGraw-Hill Book Co., 1933. Chapter 2. ¶ Beard, Charles A., and Beard, Mary R. *The Rise of American Civilization*. New York: Macmillan Co., 1930. p. 574-77. Vol. II. ¶ Ogburn, William F., editor. *Social Changes in 1929*. Chicago: University of Chicago Press, 1930. p. 881-87. ¶ Leith, Charles K. *World Minerals and World Politics*. New York: Whittlesey House (330 W. 42d St.), 1931. 213 p. ¶ Arnold, Ralph, and Kemnitz, William J. *Petroleum in the United States and Possessions*. New York: Harper & Bros., 1931. 1052 p.

the nineteenth century. Two centuries ago 800 million acres of virgin timber existed in the United States. Today 100 million acres are bearing virgin saw timber. On only about 300 million acres is the forest increasing appreciably. Agricultural lands have been used without care to prevent the depletion and erosion of the soil. Federal authorities have estimated that more than 17 million acres which were formerly cultivated have been destroyed by gulying so that this land cannot be profitably reclaimed. Erosion has removed about one-third of the surface soil from one-fourth of the cultivated land. Unless steps are taken to terrace sloping land and to improve crop practises, it is estimated that 100 million acres of crop land will be unfit for cultivation by the year 2000. The maximum of land fit for crops in 1929 was 973 million acres. In that year about one-third was in crops, another third required only plowing, while the rest needed irrigation, drainage, or clearing of forests.

Definite movements are under way to remedy some of these conditions. Rotation of crops and other improvements in farm technic have made it possible to produce more food on fewer acres. Replanting of forests, dramatically emphasized by the recent proposal to plant a belt of trees from Canada to Texas, will do much to replenish lumber supplies and prevent soil erosion. The development of national parks and forest reserves not only conserves their resources, but enlarges the opportunities for public recreation.

Our experience in the depletion of agricultural and mineral lands has stimulated public interest in the proper use of water power resources. In 1902 water-driven machinery had a capacity of 2,050,000 horsepower; in 1930, a capacity of 14,885,000 horsepower. Surveys by the federal government indicate a potential capacity of 38 million horsepower. The growth of legislation and the developments at Muscle

Shoals, Boulder Dam, and Grand Coulee indicate an increase in governmental direction, if not control, of the nation's power resources.

Educational Implications²

The school has an important responsibility in developing and sustaining a public opinion in favor of the proper utilization and conservation of natural resources. The long history of selfish and reckless exploitation of natural wealth by private interests is a proper topic for study in social studies classes. The experience and progress of foreign countries are also illuminating. Older students and adults may examine thru research the economic and social effects of soil erosion, forest fires, depletion of mineral-bearing areas, and similar problems. The question of public ownership of water power is a topic of utmost importance in any complete school curriculum.

Universities and other research centers have many opportunities to help. Mining technology may still be improved, waste in the recovery of minerals can be reduced, consumption of products can be made more efficient and, where needs exist, synthetic substitutes must be developed. Research in chemical fertilization of soils, the prevention of erosion, and the nature of plant bacteria has offered, and will continue to offer, opportunities for socially worthwhile contributions.

The utilization of land has a direct bearing upon the problem of school support. Suspension of mine operations, migrations from marginal lands, destruction of private forests, and reversion of farm lands to public ownership result often in tax losses. The burden upon some districts and states has become acute. Large tax units and federal aid will be essential if their educational opportunities are to be improved or even maintained.

² For further educational implications consult: Nourse, Edwin G., and others. *America's Capacity to Produce*. Washington, D. C.: Brookings Institution, 1934. Chapter 1, "Agriculture"; Chapter 2, "Coal and Coke"; Chapter 3, "Petroleum"; Chapter 15, "Electric Power Utilities"; p. 31-157 and p. 313-39. ¶ Ogburn, William F., editor. *Social Change and the New Deal*. Chicago: University of Chicago Press, 1934. "The Tennessee Basin," by T. J. Woolter, p. 81-89. ¶ Roosevelt, Franklin D. *Looking Forward*. New York: John Day Co., 1933. 279 p. ¶ Roosevelt, Franklin D. *On Our Way*. New York: John Day Co., 1934. 300 p. ¶ Smith, D. H. *Forest Service; Its History, Activities, and Organization*. Institute for Government Research, Service Monograph of the U. S. Government, No. 58. Washington, D. C.: Brookings Institution, 1930. 268 p. ¶ U. S. Department of Agriculture. *Proceedings of the National Conference on Land Utilization, Chicago, Illinois, November 19-21, 1931*. Washington, D. C.: Government Printing Office, 1932. 251 p. ¶ U. S. Library of Congress, Division of Bibliography. *Selected List of References on the Conservation of Natural Resources in the United States, 1912*. Supplement, 1924.

XVI. Leisure-Time Activities¹

Leisure time is no longer a privilege of the few. The steady decline of the hours of labor in industry and business prior to 1930 has been accelerated under the recent industrial codes. Applications of science in the home and on the farm have given new hours of freedom. The postponement of gainful employment for many young people has increased the need for recreational opportunities. These are but a few indications of the spread of leisure time.

Commercial interests have not been slow to utilize this free time. Whereas radio broadcasting scarcely touched the home a few years ago, today at least 40 percent of all families own receiving sets. Attendance at motion picture theaters has doubled since 1926, reaching the stupendous total of 100 million per week in 1930. There is widespread interest in commercialized football, baseball, and other sports which satisfy a desire for *passive* participation.

There is a growing demand for *active* participation in sports and recreation, as shown by the increase in the number of public playgrounds, community centers, parks, swimming pools, golf courses, and play spaces. Parks in cities over 30,000 population have increased from 76,566 acres in 1907 to 258,697 acres in 1930. Public recreational facilities are still inadequate in small towns and rural areas. National parks had 198,606 visitors in 1910 as

compared with 2,774,561^{*} in 1930. Between 1920 and 1930 the number of visitors to national forests increased sixfold.

The automobile has increased the possibility of recreation in family groups. Pleasure travel of all types has been estimated as costing at least 6 billion dollars a year. Automobile touring alone accounted for an expenditure amounting to \$3,200,000,000 in 1930. Of this amount, about 20 percent was required for actual transportation costs, while the remainder went for meals, lodging, and amusements.

The recorded number of persons using public libraries is 20 million. In 1929 publishers sold 1,133,855 books on the arts and 4,048,227 books on poetry and drama. More than 45 million copies of novels were sold during that year. School libraries with more than 3,000 volumes increased from 947 in 1923 to 1,982 in 1929. Circulation of periodicals advanced from 5,571,000 at the beginning of the century to 33,366,000 in 1930. This increase in periodical circulation has paralleled the growth of enrolment in secondary and higher education.

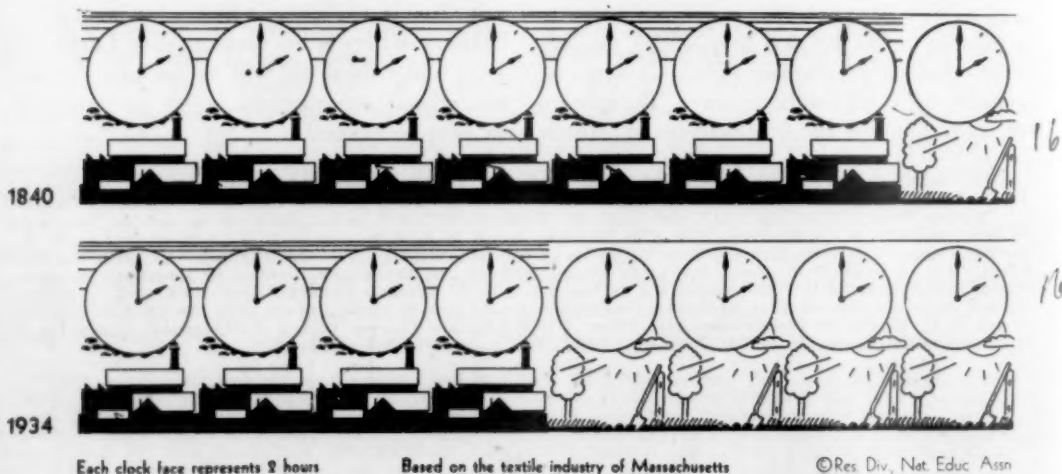
Educational Implications²

The two outstanding trends in recreation are the growing interest in *active* participation and the increase in the types and number of commercialized devices for *passive* participation.

¹ Based upon: President's Research Committee. *Recent Social Trends*. New York: McGraw-Hill Book Co., 1933, p. 388-89, 912-57, 975.

² See p. 281 for footnote.

AVERAGE WORKING DAY IN INDUSTRY



In meeting the demand for active recreation the schools have a responsibility which must be met in cooperation with playgrounds, community centers, and other public agencies. Stress needs to be placed upon those activities which may be carried over into adult life. Enrichment in the school's recreational program should include debating, drama, hobbies, and other activities which contribute to the use of leisure time for intellectual and cultural pursuits. The extended use of excursions and journeys will not only introduce more reality into education but will encourage active outdoor life.

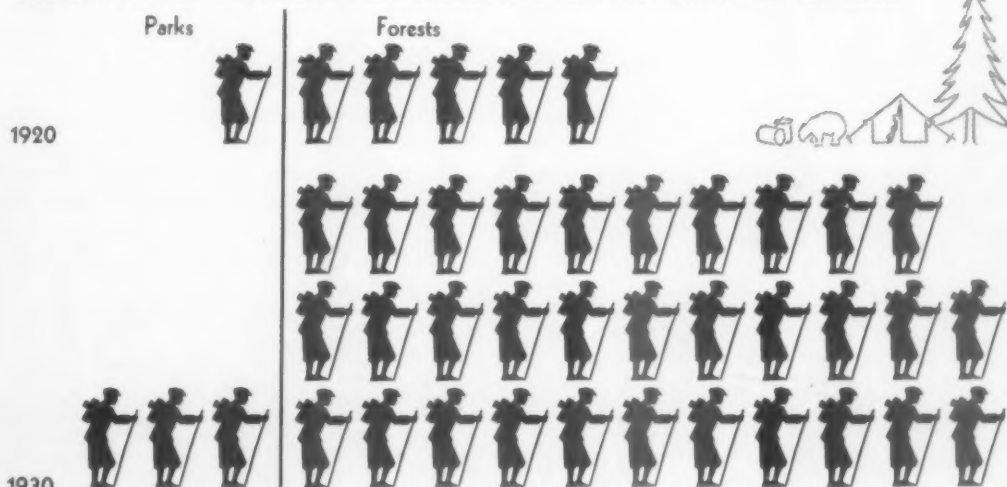
If schools are to encourage active recreation and games, they should have both indoor and outdoor play spaces. A survey in 1926-27 of 410 cities showed 48 percent of the cities failing to report gymnasiums or playrooms. In 1929 a survey in cities of 30,000 to 100,000 population showed that 20 percent of the elementary schools lacked playgrounds; half of the high schools did not have playgrounds or athletic fields. To meet this condition several states have passed legislation setting up minimum requirements for school playgrounds. It is likely that such standards will be widely adopted.

The school's contribution to passive types of recreation will consist largely in the improvement of standards of tastes and appreciations. By cooperation between schools and parent-teacher groups, motion pictures, radio programs, and publications will be made more socially constructive. In this connection the school's efforts will not be limited to preaching and social pressure, but will actually utilize the radio, the motion picture, and other devices as integral parts of the educational program. The emphasis upon teaching in all branches will take into account recreation needs. For example, changes in the teaching of English will encourage extensive reading, creative writing, and free dramatization.

A special problem for education is the promotion of the physical and mental health of teachers. It is idle to talk of developing leisure-time interests in children if teachers are unable or unwilling to participate in artistic and recreational pursuits. The present tendency to increase the teaching load and to require teachers to carry many extra welfare responsibilities is dangerous to teacher health and in many cases seriously weakens the effectiveness of the instruction.

² For further educational implications consult: Biddle, W. W. "Adult Education for Leisure; A Social-Educational Program for Cleveland." *Progressive Education* 11: 289-93; April, 1934. ¶ Bower, William C. *Character Through Creative Experience*. Chicago: University of Chicago Press, 1930. 276 p. ¶ Glueck, Eleanor T. *The Community Use of Schools*. Baltimore: Williams & Wilkins, 1927. 222 p. ¶ Harap, Henry. "Planning the Curriculum for Leisure." *Journal of Educational Sociology* 7: 308-20; January, 1934. ¶ Heaton, Kenneth L. *Character Building Thru Recreation*. Chicago: University of Chicago Press, 1929. 230 p. ¶ Jacks, Lawrence P. *Education Through Recreation*. New York: Harper & Bros., 1932. 155 p. ¶ Lundberg, G. A. "Training for Leisure." *Teachers College Record* 34: 569-79; April, 1933. ¶ Nash, Jay B. "Leisure—Threat or Promise?" *Junior-Senior High School Clearing House* 7: 517-73; May, 1933. ¶ National Recreation Association. *The New Leisure Challenges the Schools*. New York: the Association, 1933. 326 p. ¶ Steiner, J. F. *Americans at Play*. Recent Social Trends Monograph. New York: McGraw-Hill Book Co., 1933. 201 p. ¶ Zook, George F. "Public Education and National Welfare." *Official Report*. Washington, D. C.: Department of Superintendence, National Education Association, 1934. p. 25-32.

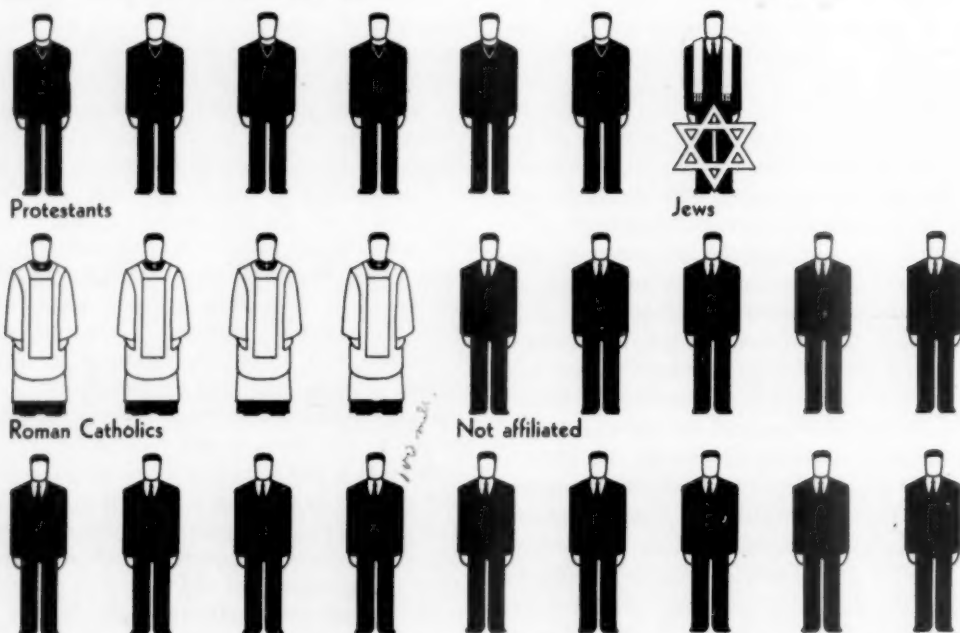
VISITORS TO NATIONAL PARKS AND NATIONAL FORESTS



Each figure represents 1 million visitors

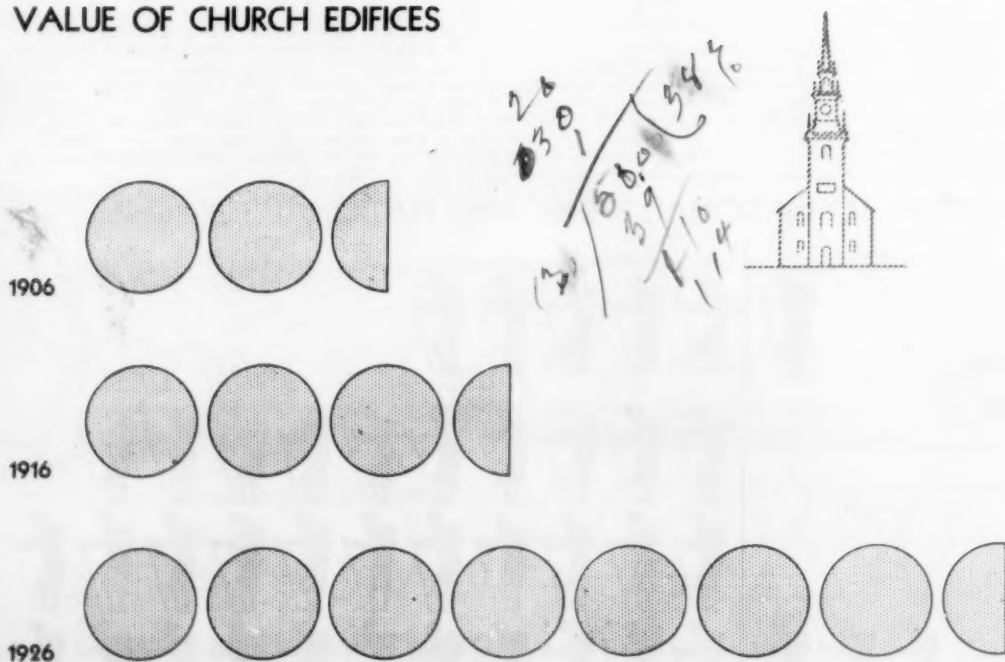
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RELIGIOUS AFFILIATIONS



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VALUE OF CHURCH EDIFICES



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XVII. Religion¹

Organized religion is apparently holding its own materially, tho in the realm of ideas and belief it is passing thru a period of profound unrest. The *Census of Religious Bodies for 1926* showed church membership increasing at the same rate as the national population, while church wealth and church expenditures were increasing more rapidly than the national income. The depression years show a higher rate of membership increase.

The degree to which the church is actually meeting the spiritual needs of its members, the part religion is playing in their everyday life, is something that defies measurement. Studies of the circulation and content of leading publications suggest that despite its apparent material stability religion holds a gradually decreasing share of the interest of the people. Between 1905 and 1909 there were 21.4 religious articles per thousand articles indexed in the *Reader's Guide to Periodical Literature*; in 1930-31 there were 10.7 per thousand. In 14 "intellectual" magazines the decline was from 396 in 1905-1909 to 282 in 1931-1932. In the last twenty-five years the number of books on the Bible per thousand indexed in the *U. S. Catalog* decreased almost 50 percent. However, there was an increase in the relative number of books on religion and science, God, Christian life, missions, and prayer. The emphasis in religious publications today is upon economic and social implications of religion in everyday affairs.

The number of children receiving religious instruction today is apparently increasing. Between 1906 and 1926 the number of children and adults in Sunday schools increased 45 percent, or at a slightly slower rate than the total population. However, the number of vacation church schools increased from 3,171 in 1925 to almost 11,000 in 1930. Week-day church schools in 45 states in 1930 enrolled 260,988. Cooperation between churches and schools resulting in high-school credit for Bible study is legal in over half of the

states today, altho the practise started in 1912.

Tendencies away from denominationalism toward unity and cooperation have taken place. Eighteen denominations were involved in mergers between 1916 and 1926.

Educational Implications²

The chief role of education, in the light of religious trends, will be to increase its cooperative efforts with organized churches in establishing the character and ethical values required by our modern civilization. The social pressures brought about by changes in government, occupations, families, recreation, and other aspects of group life require frequent adjustment so as to insure happiness to the maximum number of people. Both young people and adults will need to study these problems with the highest ethical and social standards in mind. To do this they must participate in those educational activities which will develop knowledge of proper conduct and the inclination to act accordingly.

Obviously, the memorization of codes of morals will not suffice. Individuals must learn to act in such a way that their actions enrich the lives of others. Reality in learning will necessitate opportunities to participate in self-government within the school, to utilize the local community as a laboratory where social contacts may be studied, and to develop a sense of individual responsibility to the group.

Character education is not solely the obligation of the school; the home and the community have important influences upon the developing characters of children. The schools may increase their efforts in this field, but citizens generally should inquire to what extent the constructive work of the school is being destroyed by non-school agencies. Teachers also will give more attention to those phases of contemporary life which tend either to supplement or to counteract the wholesome activities of the classroom.

¹ Based upon: President's Research Committee. *Recent Social Trends*. New York: McGraw-Hill Book Co., 1933. Chapters 7, 8, and 20.

² For further educational implications consult: Artman, J. M., chairman. "Problems Brought to Religious and Character Education by the Socio-Economic Debacle." (Panel discussion.) *Religious Education* 29: 266-70; June, 1934. ¶ Heaton, Kenneth L. *The Character Emphasis in Education*. Chicago: University of Chicago Press, 1933. 415 p. ¶ Hillis, L. B. "Trends in the Relation of Education and Religion." *Religious Education* 27: 541-47; June, 1932. ¶ Leach, R. H. "Courses in Religion in State Universities and Colleges." *School and Society* 37: 334-35; March 11, 1933. ¶ National Education Association, Research Division. "Education for Character." *Research Bulletin* 12: 43-79; March, 1934 and 12: 83-141; May, 1934. ¶ National Education Association, Department of Superintendence. *Character Education*. Tenth Yearbook. Washington, D. C.: the Association, 1932. 535 p. ¶ Neumann, Henry. *Lives in the Making*. New York: D. Appleton and Co., 1932. 370 p. ¶ Sockman, R. W. *Morals of Tomorrow*. New York: Harper and Bros., 1931. 331 p.

Summary and Conclusions

A. Economic

Preceding sections have reviewed a number of the specific trends and conditions of American society. From these details may be drawn certain general characteristics of modern life.

(1) *Science and power*—The applications of research to medicine, engineering, and industry have profoundly modified life. There has developed an amazing accumulation of knowledge. Modern power-driven machinery has transformed the home. Freed from drudgery by vacuum cleaners, electric irons, washing machines, and other inventions, families have more time for recreational and cultural pursuits. Many women have been free to enter gainful employment. Occupational patterns have been broken down by the decline of certain types of work and the creation of new jobs. Products which once were so costly as to be possessed by few are by machinery placed within the reach of many.

(2) *Potential plenty*—For the first time in history man can probably produce enough for all. Power combined with science has developed machinery which can turn out goods with incredible speed and efficiency. Each decade fewer farms are needed to supply the necessary food. But the era of plenty is only a potential one. We need still to develop a distribution system which is coordinated with the effectiveness of the production system.

(3) *Acceleration*—In the period of agrarian dominance of American life, the rhythm of life was relatively slow. Today, with power-driven machinery, buildings are constructed more rapidly, farms plowed in less time, distance annihilated by rapid transit facilities, and mass impressions speeded by new means of communication. Fashions created in Paris one week are on display shortly afterwards in New York, or even in Middletown. New improvements in automobiles, radios, trains, and airplanes steadily demand the replacement of old equipment. Changes come upon us with accelerated rapidity and make life more complex for increasing numbers of people.

(4) *Leisure time*—Year by year mankind has been freed more and more from unremitting toil. Improvements in technology have placed increasing amounts of time at the disposal of all workers. Industry is finding less need for children and youth, thereby increasing the pos-

sibilities of a lengthened period of schooling. Old age retirement systems are reducing the span of years which must be allotted to employment.

(5) *Interdependence*—An industrial society requires first of all a supply of raw materials. Our silk mills depend upon Japan for raw silk, cotton mills rely upon southern fields, and steel mills require the coal of Pennsylvania and the iron ore of Michigan. The fabrication of automobiles, telephones, and other machinery calls for imports from all parts of the world. In financial matters the world is closely bound together. Two cases in point are the bank failure in Austria which precipitated the 1931 financial crisis, and the recent request of the Chinese government for modifications of the American silver policy. The typical pantry shelf reveals the world's interdependence for food supplies. In a thousand ways our daily lives are touched by the events in remote nations and in nearby communities.

(6) *Standardization*—As the world becomes more closely related, ideas and ideals spread rapidly. The rhythm and ethics of life in industrial nations penetrate to all parts of the world. City culture thru the radio, newspapers, and magazines dominates rural culture. Advertising methods of Fifth Avenue are found effective on Main Street. The moral ideals of Hollywood are displayed in every city and town and, for better or for worse, set new standards of dress, manners, and conduct. Standards of living are cast in a mold that places the auto, the telephone, the radio, and the electrical refrigerator among the necessities of comfortable living. Overwhelmed by new additions to knowledge, people turn to the breezy news review, the anthologies of literature, and the digests of current periodicals.

(7) *Economic insecurity*—In an agrarian society each family, and to a certain extent each individual, is largely independent. As America changed from an agricultural nation to one predominantly industrial, many people surrendered their economic independence. They took jobs created by invention and science. At first, those who rebelled against this new type of life moved out to the simplicity of the frontier. Today the frontier no longer exists, and youth must look to the existing industrial organization for employment. The employee's,

and often the employer's, means of livelihood is dependent upon the business cycle, and economic security is threatened to an extent not known in an agricultural civilization.

(8) *Collective action*—Freedom of the individual in many aspects of life has been a tradition of American civilization. A peculiar type of self-reliance was required under pioneer conditions. A continent to be gained and exploited stimulated a race for property, power, and prosperity. But tho this phase of life has been greatly publicized, it was, and had to be, accompanied by collective action. The early colonists were able to exist only because people worked and fought together. The continent was won by the trains of covered wagons, welded together by railroads, educated by schools, and otherwise united by cooperation among groups of people. Today thru legislatures, conferences, committees, associations, and other groups, citizens are working together to advance the general welfare.

(9) *Centralization*—Partly as a result of economic conditions and partly because of the demand for more collective action, there has developed an increase of government participation in everyday life. The federal government increases its control and direction of industry, agriculture, and banking. State governments increase their supervision of education, housing, police work, and other social activities. Great companies merge into larger corporations, with national and even international affiliations. Chain stores are important competitors of the independent corner stores. Credit and banking facilities reach from the smallest town to Wall Street.

(10) *Objectivity*—The farmer planted his crops by certain traditional formulas until controlled laboratory studies displaced many of these "rule of thumb" guides with scientific principles and practises. The home has surrendered much of its traditional domination of the individual and released youth to an ever widening sphere of influences. Experience and experiments are substituted for "arm chair" philosophy. More and more people are subjecting all phases of life to the pragmatic test: "Does it work?" The demand for objectivity has set the stage for clearer thinking and more efficient action in regard to the intricacies of modern life.

B. Educational

What do the foregoing social and economic changes mean to education? No one can predict with absolute certainty. Earlier sections of the bulletin have pointed out some of the specific adjustments which are being, and perhaps will continue to be, made. The purpose of the concluding paragraphs is to generalize from these specific educational implications.

(1) *Philosophy of education*—If there is to be an adjustment of education to a changing civilization, schools need to direct their efforts toward broader objectives. Education has been primarily concerned with making people literate. Book learning that developed abilities to memorize, to read, to comprehend, and to recite has been of fundamental importance. Schools have been organized, teachers trained, and instructional materials prepared with book learning as the controlling factor. It is no condemnation of the past to hold that present social conditions and objective knowledge as to the nature of the learner make it necessary for the general philosophy of education to be enlarged. Education must be recognized as a continuous process from birth to death; from sunrise to sunset. It is not something that goes on for a few hours each day within the four walls of the school. Education arises from, exists in, and will continue to flourish as a part of its surrounding social culture. It cannot be completely isolated from life outside of the school.

(2) *Teachers*—Teacher-training institutions have in the past produced capable technicians—well-grounded in knowledge and methods of instruction. But today society needs teachers who are zestful and capable students of social problems. If in the future training agencies have fewer, more carefully selected students, they should find new opportunities to improve the social understanding of teachers now in service and to help school systems to keep pace with an advancing social order. There falls upon the individual teacher the obligation to keep abreast of social trends and to participate actively in life outside of school. At the same time he will need to perform his professional duties in accordance with good taste, high standards of scholarship, and respect for community opinion.

(3) *Childhood*—Constantly new discoveries are being made about the nature and the nurture of children. Educational methods that treat

children as small-sized adults will continue to lose ground. More attention will be given to individual differences. The influence of the early years upon later life suggests the advisability of further efforts to remove disabilities and to stimulate potential talents. All of the activities of life are recognized increasingly as educational, altho not necessarily efficient and constructive. The new attitudes toward childhood forecast the hopes and the values that people generally, and educators in particular, expect to characterize our future American civilization.

(4) *Social curriculum*—It follows certainly that with the extension of knowledge in all fields of human life the curriculum of the schools will be greatly enriched. Thru the recasting of existing courses and the integration of all types of subjectmatter in terms of meaningful units, the lag between the advance of knowledge and the school's offering will be taken up. The use of facts in social experiences within the school, such as pupil government, committees, clubs, publications, and the like, will bring a form of enrichment characteristic of but few educational programs of today. Pupils will study the interrelations between the various aspects of society, noting where inarticulations occur, exploring the causes of difficulty, and projecting possible improvements.

In many instances this social emphasis will require new school courses and activities. Better opportunities for pupils to study home life, industry, and labor conditions will tend to develop a higher type of social intelligence. Besides the addition of new units of study, there will be an increased emphasis upon the social aspects of existing courses. By tracing the history of writing, of numbers, and of spoken language, there will be gains in an appreciation of the problems and progress of group life.

(5) *Instructional methods and materials*—Since schools have been primarily places for book learning, the dominant classroom procedure has been the recitation. This method succeeded in spreading a degree of literacy among the people. It contributed little to an understanding of the problems of modern life. Recognition of the futility of the typical recitation does not minimize its contribution to American education. But thru experiments teachers have found new methods which, while utilizing the advantages of the older procedures, promise to develop the type of thinking ability required

by modern life. Thru the use of libraries, laboratories, debates, conferences, and committees, students are participating in the direction of their own learning. The teacher is no longer the dictator, but a guide.

The social emphasis in education calls for the development of new materials, textbooks, and equipment. Universities, research centers, and teacher-training institutions will assume more responsibility for developing materials which can be used to enrich the student's reading. Thus, students will be constantly in touch with up-to-date and vital sources of information.

Every effort will be made to encourage the pupil to become so interested as to go beyond any formal assignments. Education will cease to be a list of activities bound between the covers of the course-of-study bulletin. It will become all of the activities of life thru which the pupil may improve himself. Schooling of this type will make for open-mindedness, tolerance, and suspended judgment as well as for initiative and decisive action. Thus equipped, the public of tomorrow should be able to make more intelligent decisions in matters of public policy.

(6) *Internal organization and management of schools*—It seems likely that the present school system will extend its systematic efforts both downward to include younger children and upward to provide for adults. The units of the system may be reduced in number, and certainly will be more closely integrated to further the continuity of school experiences. Types of schools may become more flexible and varied—such as summer schools for workers—to take care of the requirements of social and economic organization.

The management of the school system may be expected to adjust itself to newer social needs and a broader theory of education. Artificial and unnecessary distinctions between types of teaching positions will give way before the realization that all teachers are workers in a common cause. Classroom teachers, as they become better trained and more socially minded, may be expected to bring their knowledge of child nature and needs into the formulation of instructional policies. School systems will provide further for the democratic sharing by administrators, teachers, and students of the responsibilities of management.

(7) *External contacts and administration*—

The schools will need to be organized so that educational experiences available to children may have the maximum of concreteness and reality. Educators will figuratively level the walls of the schools thru excursions, journeys, and extended trips. Experts and creative artists will enter the schoolroom in person or by means of the radio and the sound motion picture. The school will not be a world set apart, with manners, ethics, and problems different from those of the real world.

In this breakdown of isolation the school will integrate its program more and more with libraries, playgrounds, and other agencies for community betterment. Thru coordinated efforts there will develop local, state, and even national programs for cultural progress. The layman will cooperate in these activities and thereby obtain an understanding of public education which the typical "publicity program" has not yet succeeded in giving him.

The financial support of education is an administrative problem which needs to be considered in the light of social conditions. The recent depression has clearly revealed that the financial problems of education are deeply rooted. If America has passed its period of greatest prosperity, people may find it difficult to buy adequate education as well as other social services. There are relatively few, however, who are willing to accept this assumption. There is reason for believing that our national income can be increased beyond its 1929 peak, if we will make intelligent use of our natural resources, labor, and means of production. In this social advance, education, if given adequate financial support, will contribute to the vocational efficiency of individuals and the social intelligence of people generally.

(8) *Character and citizenship*—The American public school has always been concerned with morals and character development. It has been generally recognized that the character and the social intelligence of the people generally are the basis of a more perfect and more permanent democracy. But many of the efforts for character development were formulated under a narrow philosophy of education. Helpful and valuable as some of these technics are today, they need supplementing in the light of

the known facts of individual growth and of social progress.

While the social emphasis in the social sciences and all school activities will probably constitute the chief preparation for a high type of citizenship, it is not enough in itself. We may expect the development of tests and standards whereby the individual may explore his own capabilities and defects. Continuous and careful record keeping of these surveys will supply data upon which intelligent vocational, educational, and personal decisions may be made. It is reasonable also to expect that classes in character development may be able to contribute something under favorable conditions.

Another general trend will be the shaping of the entire program so as to contribute constructively to the wholesome use of leisure. There are some who view an increase of leisure time as a threat to good character. Others view the new freedom as an opportunity for the enrichment of character. Which of these predictions will come true depends largely upon the amount of intelligence which the American people bring to the problem. If the schools develop students with the maximum ability to direct their own time along wholesome lines, the threat is not serious. To do this, the school's program must be broadened in scope and attractiveness as suggested in preceding paragraphs. The arts and crafts must be taught by artist-teachers who can awake the latent talents which exist.

✓ Changes in government, in economic organization, in labor conditions, in population, and the many other phases of life have produced many strains upon our American civilization. Some educators view the situation with great pessimism, but prefer to do little or nothing. Others believe that if the problems of group living are carefully studied, the people will find the way. Still others believe that education must supply the people not only with light but with considerable guidance. The proposals arising from these three groups of educators are based upon diverse social assumptions and philosophies. Yet in spite of genuine differences as to the steps necessary to meet changing social conditions, our faith in America leads to the belief that "it is the dawn and not the dusk of the gods."¹

¹ Quotation from *The Rise of American Civilization*, by Charles A. Beard and Mary R. Beard. New York: Macmillan Co., 1930, p. 800.



THE BRIEF span of 150 years cannot have extinguished the zeal of the people of the United States to establish justice, insure domestic tranquillity, promote the general welfare, and secure the blessings of liberty to themselves and their posterity. Nor do we of today admittedly value less than did our fathers freedom of worship, of speech, and of the press, the right of petition, of a speedy and impartial trial, and the sacredness of life and liberty, against impairment without due process of law. These historic ideals still constitute the foundation upon which must rest any presentday statement of the social-economic goals of America. But the times demand a translation of these ideals into terms charged with new meaning. . . .

It goes without argument that the materials of instruction concerning social and economic issues have to be drawn in large part from the moving panorama of current life. They are not easy of access in reliable form, and are extraordinarily hard to interpret with assurance. This increases the difficulty of their use by all teachers, but particularly by the rank and file who have assumed little responsibility in the past for understanding the issues involved in our national life.

Education, therefore, needs its own machinery to gather continuously and interpret simply and fearlessly the salient facts of the moving social-economic scene.—Committee on Social-Economic Goals of America, National Education Association.

