Research Bulletin

OF THE

National Education Association

VOLUME X

January to November, 1932

The *Research Bulletin* is issued by the Research Division, a section of the headquarters staff of the National Education Association. This division was created in February, 1922, for the purpose of conducting scientific studies of special interest to members of the teaching profession.

Bulletin One was issued by the Research Division in June, 1922, and *Bulletin Two*, in November, 1922. The first number of the *Research Bulletin* is Volume I, No. 1, January, 1923, entitled "Facts on State Educational Needs." With Volume I, No. 1, the *Research Bulletin* became a regular publication, issued five times each year—January, March, May, September, and November. The *Research Bulletins* composing Volumes I, II, III, IV, V, VI, VII, VIII, IX, and X are listed on the inside back cover of the November, 1932, *Bulletin*.

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FOREWORD

IN TIMES of stress we need to come back frequently to the essentials of American educational philosophy. We need to remind ourselves and the public that our democracy is based upon complete educational opportunities for all children and that good teaching is an indispensable element in such an opportunity. School administration primarily exists to bring children under the influence of trained teachers possessed of a high degree of ability and character. How to attract such individuals to the teaching profession, how to retain their services, how to help them to improve professionally and culturally, are problems of first importance. They are even more important in times of adversity than in times of prosperity. This bulletin, therefore, appears at an opportune time.

This is the first of two new bulletins dealing with the field of teacher personnel administration. These bulletins summarize a wealth of material bearing on various problems involved in the development of efficient teaching staffs. They report findings from the Research Division's latest inquiry as to current practice concerning these problems in city school systems. They place the reader in touch with the best professional opinion in this important field. The present bulletin discusses practices in the selection and appointment of teachers, while the one for March, 1932, will be devoted to practices affecting the retention, promotion, and improvement of teachers.

During the past ten years the National Education Association has become a great clearing-house for information and discussion of the problems involved in keeping a capable and well-trained teacher in every classroom. This bulletin and the one to follow are important contributions to the Association's program in this field. School boards, school executives, teachers, college specialists, and civic groups studying such problems will find these two bulletins particularly useful in furnishing a factual basis for their work.

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

Introduction

School administration is not an end in itself, but rather a means of providing a wholesome environment and effective instruction for children. Good administration seeks to plan, guide, and coordinate the entire school system so that the outcomes will be of maximum value to the pupils and to society in general. Of the many specific factors which contribute to the success of the school, probably the most influential are the character and status of its classroom teachers. Sound educational administration, therefore, must give major attention to the nature and needs of the teaching staff. It cannot treat its teachers as if they were unskilled laborers working by the hour or by the day in a wholly impersonal relationship with their employers. Wise administration will devote careful study to the principles and practices involved in recruiting and continuously improving a high-grade teaching personnel. Such study should cover all aspects of teacher improvement: professional, cultural, economic, and social. In formulating principles and evaluating practices, of course, an objective point of view should be maintained. The primary question to be answered is not *What do teachers deserve as rewards for devoting their lives to a great cause?* Rather, it is *What policies and practices will best procure and retain teachers of splendid ability, foster their self-respect and initiative, and stimulate them to improve continuously the quality of their service?*

That this philosophy is being increasingly accepted is attested by the many requests received by the Research Division from superintendents, principals, and teachers, asking for reliable information on problems of teacher personnel. The lines of interest revealed in these requests have been used as the basis for a continuing study of theory and practice in various phases of this field.

Earlier surveys by the Research Division—In 1923 the Research Division, in cooperation with the Salary Committee of the National Education Association, made its first systematic effort to collect data on personnel practices in city school systems.[1] Although this first inquiry dealt mainly with the larger problems of teachers' salaries and salary schedules, it also included certain special topics, such as the amounts of training and experience required of newly appointed teachers, the rating of teachers, salary allowances for summer school attendance and for professional courses completed during the school year, leaves of absence for study and educative travel, sick leave with pay, tenure of position, and retirement provisions. Responses to the inquiry were received from approximately 1,000 city school systems from 2,500 to over 100,000 in population.[2]

In 1928 a second survey was made of practices affecting teacher personnel.[3] This survey included most of the special items enumerated above, and several others in addition. Usable information was received from 1,532 school systems in cities over 2,500 in population.

Scope and procedure of this study—Because of the constant demand for up-to-date information in this field, a third investigation was undertaken in the spring of 1931. The general plan of this survey was similar to that of the 1928 study, but was somewhat more comprehensive. A four-page printed questionnaire, which is reproduced at the end of this bulletin, was sent to all school systems in the 2,880 cities over 2,500 in population according to the 1920 census.[4] From these a total of 1,489 usable replies were received. The following summary shows how this response compares

[1] National Education Association, Salary Committee. (E. S. Evenden, Chairman). *Report: Teachers' Salaries and Salary Trends in 1923.* Washington, D. C.: the Association, July, 1923. Chapter III. "Special Provisions Affecting Teachers' Salaries in the United States." p. 48-57.

[2] Since 1923 the Research Division has conducted a biennial survey of the salaries paid teachers and other school employees in city school systems of the United States. The latest of these is summarized in: National Education Association, Research Division. "Salaries in City School Systems, 1930-31." *Research Bulletin* 9: 161-228; May, 1931. Washington, D. C.: the Association.

[3] National Education Association, Research Division. "Practices Affecting Teacher Personnel." *Research Bulletin* 6: 205-56; September, 1928. Washington, D. C.: the Association.

[4] At the time the questionnaires were mailed out, the names of superintendents of schools were not available for those communities whose populations had changed from less than 2,500 in 1920 to 2,500 or above in 1930.

with the total number of cities in each population group according to the 1930 census:

Population group	Number of cities according to 1930 census	Cities replying	
		Number	Percent
Over 100,000	93	85	91.4
30,000 to 100,000	224	188	83.9
10,000 to 30,000	663	402	60.6
5,000 to 10,000	886	415	46.8
2,500 to 5,000	1467	399	27.2
Total	3333	1489	44.7

A large majority of the cities over 100,000 and of those from 30,000 to 100,000 in population responded, while a substantial proportion of the 10,000-to-30,000 and the 5,000-to-10,000 groups did so. The group of cities from 2,500 to 5,000 in population was not so well represented in this respect. There is, however, no reason to believe that the representativeness of the cities reporting in any population group was affected by factors of selection. The data given in the following pages may therefore be accepted as fairly typical of all cities in any particular population group. It should be borne in mind, however, that no information is included concerning the thousands of rural and village school systems having populations below 2,500. The data as given cannot be regarded as representative of American public schools in general, but only of city systems of the sizes indicated.

Plan of presenting the results—The results of the 1931 survey are published in two separate numbers of the *Research Bulletin*. Part I, which deals with practices affecting the selection and appointment of teachers, is presented in this issue. Part II, which discusses practices affecting the retention, promotion, and improvement of teachers, will appear as the issue for March, 1932.

Each of these bulletins is organized according to a threefold plan, as follows:

1. It summarizes what is believed to be the best available opinion concerning the issues involved and the merits of various practices.

2. It presents recent and representative data as to the nature of present practices, and to some extent the trend of practice during recent years.

3. It gives a selected list of pertinent references for further study.

These bulletins do not attempt to draw final conclusions concerning the problems studied. Each problem alone might be subjected to much more intensive study than is possible here, and still many points would remain unsettled. As in most other phases of school administration, the influence of various practices upon the effectiveness of instruction is very difficult to measure. Moreover, actual experience with many of these practices has been too meagre to permit an adequate estimate of their value. Final judgment concerning them must, therefore, be suspended until more facts are available. Further scientific investigation plus longer and more carefully evaluated experience are needed before authoritative answers can be given as to the specific relation between different practices and school efficiency.

But in the meantime the schools must continue to operate. Children must be taught. Teachers must be recruited, trained, appointed, paid, and stimulated to develop themselves and to give increasingly finer service to the community. Superintendents, school boards, and teachers' organizations are constantly making decisions. They should make them according to the most reliable evidence available, limited though it may be. This is not to suggest that common practice should be followed whenever experimental evidence is lacking. While common practice is sometimes a better criterion than unsupported individual opinion, administrative decisions should be influenced also by the judgment of experts and by the conditions peculiar to each individual community.

Topics included in this bulletin—As stated above, this bulletin deals with problems and practices involved in the selection and appointment of classroom teachers. It does not pretend, however, to cover all of the detailed problems which arise in this field. Rather it discusses five topics about which questions are frequently received from administrators and teachers. These are as follows:

1. Training requirements for newly appointed teachers.
2. Experience requirements for newly appointed teachers.
3. Employment of married women as teachers.
4. Appointment of local residents as teachers.
5. Routine procedures in the selection of teachers.

Additional material concerning these problems, particularly with reference to details or related aspects which are beyond the scope of this study, may be found by consulting the selected bibliography at the end of the bulletin.

Training Requirements for Newly Appointed Teachers

Specialized training for any type of work becomes necessary when that work has developed to the point where it requires knowledge and skill of a relatively high order. When such work is of great value to society as a whole, and when the general public becomes aware of this fact, barriers are set up which prevent the admission of persons who are unprepared to give a high grade of service. The state now examines with extreme care the qualifications of prospective physicians. Persons planning to enter the legal profession must usually meet special requirements as to character and professional training. Society protects itself similarly in many other forms of professional and business service.

Increases in statutory requirements—Teaching service is now among the fields of work in which the public insists upon some measure of protection against incompetence. This has not always been true. In our early history the formal instruction of children was considered neither sufficiently complex and difficult nor sufficiently vital to require teachers of high calibre. However, as our philosophy of education has broadened and deepened to include many different aims, services, and technical procedures, and as society in general has gradually realized the importance of the influences under which the child develops, minimum requirements for admission to teaching have been established.

The oldest method of certificating persons for teaching is by examination, and for many years most states were satisfied with this type of requirement. Many states have now gone beyond this stage and are maintaining standards in terms of scholarship prerequisites, either with or without the use of special examinations in addition. Especially within recent years great progress has been made toward higher scholastic requirements. As recently as 1921 thirty states maintained no definite scholarship standards for certification, and the four states most advanced in this respect required less than one year of professional training beyond high-school graduation. In 1926, however, only 15 states had no statewide scholastic requirement for entrance, while nine required one full year of professional training beyond the high school, and four required two years of work beyond the high school.[1] The tendency in certification is clearly in the direction of increased training and less dependence upon examinations. Moreover, in a number of states common practice even in rural areas is considerably above the minimum statutory requirements.

In addition to the minimum requirements for admission to the profession, some states require higher and more specialized qualifications for teaching in the high school and in various special subjects.

Necessity of adequate training—Competent authorities in education are now generally agreed that every state and local community should set up professional training requirements which not only will protect children from unprepared teachers, but will aim to raise teacher competence to the highest possible level. Lewis expresses this philosophy as follows:

> Teaching, if it is to be skilled, and no other kind should be acceptable, demands a trained, experienced, and competent teaching personnel. The product of the public school will in many cases continue to be disappointing until our children are instructed by teachers properly qualified for this important service. Making good citizens is a skilled service and cannot be performed by unskilled workers.[2]

Buckingham points out that the increased need for trained teachers is due to the growing demands of a complex society:

> The modern demands of society and of civilization require an everlengthening and intensive period of training for children and young people. Longer and longer grows the period of infancy—the period of dependence of the human child upon adult guidance. Of supreme importance, therefore, it is, that there be at the service of society as the teachers of its dependents, men and women of "first-rate intellect, morals, and skill."[3]

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[1] Cook, Katherine M. *State Laws and Regulations Governing Teachers' Certificates*. U. S. Department of the Interior, Bureau of Education, Bulletin, 1927, No. 19. Washington, D. C.: Government Printing Office, 1927. p. 12-16.

[2] Lewis, E. E. *Personnel Problems of the Teaching Staff* New York: Century Company, 1925. p. 33.

[3] Buckingham, B. R. *Supply and Demand in Teacher Training*. Ohio State University Studies, Vol. II, No. 15. Bureau of Educational Research Monographs, No. 4. Columbus, Ohio: Ohio State University, March 15, 1926. p. 3-4.

Robinson offers four reasons why present-day teachers should have more ability and training than in the past:

1. As society advances and becomes more complex, a broader educational background is demanded before specialization begins. More time for acquaintance and interpretation is needed than when civilization was less developed and less complex.

2. During the past quarter of a century the sciences dealing with the physical and mental make-up of the child have developed at an unprecedented rate. The science of education has added much technical information that is needed by the prospective teacher. This vast amount of information is now available in suitable form for the teacher's guidance and makes a legitimate claim to a place in the normal school curriculum.

3. The application of such principles of philosophy as "one learns to do by doing," demands more observations, participations, conferences, and teaching by the prospective teacher than heretofore. The addition of one or two years to the course allows for more of this type of laboratory work in the normal school curriculum.

4. More liberalizing subjectmatter is being introduced into the training courses. These courses are designed to lead students to the everwidening circle of related subjectmatter more "advanced" in character and thus to awaken and promote the broadening of their intellectual horizon. This in turn will be passed on to pupils through richer teaching.[1]

The right of the state to prescribe desirable minimum standards for entrance to the teaching profession is stated vigorously by Buckingham as follows:

There are those who, for selfish reasons, want entrance into teaching made easy. They regard it as their "right" to become teachers or to have their relatives and friends become teachers. There is no right in the matter except the right acquired by paying the price of competency. The state has rights, the community has rights, and the children have rights. . . . and one of the undoubted rights of the state—in this case acting for the community and the child as well as for itself—is to say what kind of teachers it wants in its schools. This is one of its inherent rights, one of the rights which no individual may infringe. . . . The school does not exist to furnish jobs for anybody.[2]

A few, however, would qualify the generally accepted views stated above. Although such persons agree that standards of service must be kept high, they consider other factors more important than a large amount of formal training. Dillard fears that an overemphasis upon professional teacher training will produce mechanized teachers who lack originality, inspiration, and initiative. He recalls the time when:

. . . teaching was hardly thought of as a profession. Young men and women and older men and women took it up to make a living or an extra penny when nothing better seemed at hand. Any plan of professional preparation, as for law or medicine, was nowhere in the landscape, nor even on the horizon. . . . While the thing we call personality cuts a figure in whatever anyone does, it is in teaching that personality cuts deepest. . . . All of us know personally numbers of fine teachers who have not had professional training. . . . And yet, of course, teaching has become a profession. As such it demands some professional preparation. Not however so very much. It is easily overdone. It can easily fall into the vice of killing originality and making molds.[3]

Champlin, on the other hand, believes there is little danger of overtraining our teachers. He states:

the claim. . . . that the professional training of teachers is easily overdone and that it destroys originality and individuality is hardly borne out by the facts. Most of us would have to search for a pretty long time to discover any actual case of an overtrained public school teacher and those in a position to observe most widely will testify that the most thoroughly prepared in pedagogy for classroom work are the very ones who possess the greatest amount of adaptability, resourcefulness, and spontaneity in the daily round of instructional responsibilities. . . . The professional preparation of public school teachers has been so conspicuously underdone in past generations that it is inopportune to condemn the present program and premature to indict the leaders who so loyally and zealously seek to elevate the professional standards of the several hundreds of thousands now engaged in some form of teaching employment.[4]

The desirable minimum training—Leaders in the field of teacher preparation are generally agreed that beginning elementary teachers should have not less than two years, and beginning high-school teachers not less than four years of training beyond graduation from high school.[5] State school surveys are urging the establishment of such requirements almost im-

[1] Robinson, William M. "Shall Untrained Persons Be Employed to Teach Our Children?" *School Life* 11: 59; November, 1925.

[2] Buckingham, B. R. *Supply and Demand in Teacher Training*. Ohio State University Studies, Vol. II, No. 15, Bureau of Educational Research Monographs, No. 4. Columbus, Ohio: Ohio State University, March 15, 1926. p. 155-6.

[3] Dillard, J. H. "What Is Teacher Training?" *School and Society* 25: 406; April 2, 1927.

[4] Champlin, Carroll D. "What Teacher Training Is." *School and Society* 25: 572-3; May 14, 1927.

[5] See these references: National Education Association, Research Division. "A Self-survey Plan for State School Systems. Part II. Handbook." *Research Bulletin* 8: 113-14; May, 1930. Washington, D. C.: the Association.
Cubberley, E. P. *Public School Administration*. Boston: Houghton Mifflin Co., 1922. p. 226.
Lewis, E. E. *Personnel Problems of the Teaching Staff*. New York: Century Co., 1925. p. 58-9.

mediately, even where standards have been very low. For example, the preliminary report of the recent survey of the public schools of Missouri recommends that after July 1, 1932, (1) an applicant for a high-school teacher's certificate of the lowest grade should have completed four years of work in a standard *A* college or its equivalent in academic or scientific courses, of which at least 12 semester hours should have been in professional education and practice teaching of high-school subjects; and (2) an applicant for an elementary teacher's certificate of lowest grade should be a graduate of a standard senior high school and have completed in addition thereto a teacher-training course of two years as prescribed by the State Department of Education.[1]

Myers sums up the consensus of expert opinion regarding quantitative standards of teacher preparation as follows:

> The day has passed in American education when it was necessary to try to prove that one year of training beyond the high school was an insufficient amount of training for teachers. No important recommendation or proposal regarding training requirements for teaching has been made within the last ten years which contemplated a minimum training of less than two years beyond the high school for elementary teachers and four years for high-school teachers.[2]

What is the ultimate goal?—There are some who assert that the standards mentioned above should be regarded as only temporary; that we should be satisfied with these goals only so long as is practically necessary; and that as soon as conditions permit, the minimum requirements should be increased still further. Buckingham contends that the two-year course for elementary teachers is insufficient, although it is a desirable step toward something better. He reminds us that four years of training is customarily regarded as a minimum for admission to a truly professional calling. Therefore he believes that:

> The goal should be a four-year course for every teacher; and this goal should not be a visionary one. It should at this moment form part of the definite plans of our educational leaders; its realization should be anticipated at an early date.[3]

Almack is less certain as to the desirability of requiring more than two years as a minimum training period for all beginning elementary teachers. While asserting that he does not oppose four years of collegiate preparation for such teachers, he contends that:

> . . . . we have no conclusive evidence that it is worthwhile to extend the training period this far. It is better to set down a reasonable standard—say two years—leaving it to the future to increase this minimum in the light of experience and investigation.[4]

On the other hand, we occasionally find institutions for teacher preparation which advocate more than four years of college training for both elementary and high-school teachers. Such an institution is the Teachers College of the University of Cincinnati. Following are some selected statements from one of its descriptive publications:

> The Teachers College operates as a professional college within the University, maintaining a three-year professional program, based upon a two years' liberal arts prerequisite . . . . and awards the strictly professional degree of Bachelor of Education, herein conferring a degree equal in rank to the professional degrees conferred in law, engineering, etc. The opportunity of the student to secure the degrees of Bachelor of Arts or Bachelor of Science in Education at the end of the fourth college year is in agreement with the same opportunities offered to students who have transferred to other professional schools of the University. It is not a requirement that students secure such a degree, as taking such fails to mark the completion of the standard three-year professional course in teacher training considered essential by the Teachers College. . . .
>
> The final year is devoted to practice teaching, related practicum instruction, and advanced courses in the University, upon the successful completion of which the student is awarded the degree of Bachelor of Education, and becomes eligible for the appropriate type of State Provisional Certificate and rating on the preferred lists for appointment in the Cincinnati Public Schools.[5]

Present practice in city school systems—The preceding pages indicate the trend of competent opinion concerning minimum training requirements for teachers. We now pass to a consideration of the quantitative requirements set up for initial appointment in city school

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[1] Strayer, George D., and Engelhardt, N. L., directors. "A Preliminary Report of the Survey of the Public Schools and Higher Institutions in the State of Missouri." *Eightieth Report of the Public Schools of the State of Missouri*. Part I. Jackson City, Mo.: State Superintendent of Public Schools, 1930. p. 140-41.

[2] Myers, Alonzo Franklin. *A Teacher-Training Program for Ohio*. Contributions to Education, No. 266. New York: Bureau of Publications, Teachers College, Columbia University, 1927. p. 108.

[3] Buckingham, B. R. *Supply and Demand in Teacher Training*. Ohio State University Studies, Vol. II, No. 15, Bureau of Educational Research Monographs, No. 4. Columbus, Ohio: Ohio State University, March 15, 1926. p. 154.

[4] Almack, J. C., and Lang, A. R. *Problems of the Teaching Profession*. Boston: Houghton Mifflin Co., 1925. p. 23.

[5] *Announcement of the Teachers College, 1931-32*. University of Cincinnati Record, Series I, Vol. 27, No. 2. Cincinnati, Ohio: the University, April, 1931. p. 14-15.

systems. Table 1 summarizes such data for nearly 1,500 cities of all sizes in 1930-31. The table reveals the following main facts for the school systems reporting:

1. Only 3 percent of all the cities appoint new elementary teachers with less than two years of training beyond high-school graduation. This percentage varies from zero among cities over 100,000 to 5.5 among cities of 2,500 to 5,000 population. Most of the cities in each group require just two years, but about 22 percent in all groups combined insist upon even more. Among the cities over 100,000 about 20 percent require three years and 15 percent require four years of collegiate preparation.

2. Practically all cities which have junior high schools require at least two years, and about half of them require four years of college preparation for initial appointment in these schools. The proportion having minimum requirements of four years or more ranges from 40 percent in cities of 2,500 to 5,000, to 72 percent in cities over 100,000 in population.

3. More than 98 percent of all the cities reporting now demand at least four years of higher education of their newly appointed teachers in senior high schools. A few require five years, and two cities report a minimum requirement of six years. In 12 percent of the cities over 100,000 in population the requirement is five years beyond high-school graduation.

Examination of the individual responses upon which Table 1 is based suggests that the figures given understate slightly the requirements for admission to teaching in cities. In reporting, several cities stated that while only two years of college training are required officially for elementary teaching, in actual practice teachers with no more than that amount are rarely given consideration. Similarly, some cities have officially set four years

TABLE 1.—EDUCATIONAL QUALIFICATIONS REQUIRED OF NEWLY APPOINTED TEACHERS IN 1930-31

Number of years training required beyond high-school graduation	Cities over 100,000 in population		Cities 30,000 to 100,000 in population		Cities 10,000 to 30,000 in population		Cities 5,000 to 10,000 in population		Cities 2,500 to 5,000 in population		All cities reporting	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7	8	9	10	11	12	13
Elementary schools:												
Less than one year	.....	.....	.....	.....	1	.3	1	.2	1	.3	3	.2
One year	.....	.....	3	1.6	5	1.3	13	3.2	21	5.2	42	2.8
Two years	54	64.3	126	67.4	310	78.3	311	75.1	306	76.3	1107	74.7
Three years	17	20.2	40	21.4	60	15.1	62	15.0	59	14.7	238	16.1
Four years	13	15.5	17	9.1	20	5.0	26	6.3	14	3.5	90	6.1
Five years	.....	.....	1	.5	.....	.....	1	.2	.....	.....	2	.1
Total	84	100.0	187	100.0	396	100.0	414	100.0	401	100.0	1482	100.0
Junior high schools:												
Less than one year	.....	.....	.....	.....	.....	.....	1	.3	1	.3	2	.2
One year	.....	.....	.....	.....	2	.6	3	.9	4	1.3	9	.7
Two years	7[1]	10.1	24	14.6	72	21.4	93	27.9	95	29.9	291	23.8
Three years	12[2]	17.4	31	18.9	79	23.4	86	25.8	91	28.6	299	24.5
Four years	47	68.1	107	65.3	183	54.3	150	45.1	126	39.6	613	50.2
Five years	3	4.4	2	1.2	1	.3	.....	.....	1	.3	7	.6
Total	69	100.0	164	100.0	337	100.0	333	100.0	318	100.0	1221	100.0
Senior high schools:												
Less than one year	.....	.....	.....	.....	.....	.....	.....	.....	1	.3	1	.1
One year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Two years	.....	.....	3	1.7	6	1.6	2	.5	1	.3	12	.9
Three years	2	2.3	1	.5	3	.8	5	1.3	2	.5	13	.9
Four years	73	85.9	162	91.1	356	93.7	365	95.5	366	98.1	1322	94.6
Five years	10	11.8	11	6.2	15	3.9	9	2.4	3	.8	48	3.4
Six years	.....	.....	1	.5	.....	.....	1	.3	.....	.....	2	.1
Total	85	100.0	178	100.0	380	100.0	382	100.0	373	100.0	1398	100.0

Read table as follows: Of the 84 cities over 100,000 in population which reported requirements for newly appointed elementary teachers, 54, or 64.3 percent, require 2 years beyond high-school graduation; 17, or 20.2 percent, require 3 years, etc. Similarly read data for other teacher and population groups.

This tabulation is based on the replies to question 1 of the inquiry blank reproduced on page 30.

[1] One of these cities requires 2 years in the 7th and 8th grades, and 4 years in the 9th grade.

[2] One of these cities requires 3 years in the 7th and 8th grades, and 4 years in the 9th grade.

of training as the minimum for high-school teachers, but in practice employ very few with less than five years beyond high-school graduation.

A few of the cities also reported that the minimum training required varies somewhat according to the amount of teaching experience which the applicant has had. For example, an elementary teacher who has had two or three years of experience may be employed with only two years of professional preparation beyond high school. On the other hand, one who has had no experience may not be considered for appointment unless he has had four years of training at the college level. In Table 1, however, all such cases have been tabulated according to the absolute minimum amount of training required, irrespective of the corresponding experience requirements.

Comparison of survey results in 1931, 1928, and 1923—Wherever possible in this bulletin, and in the one to follow, comparisons are drawn between the findings of the 1930-31 survey and those of the two earlier studies made by the Research Division in 1922-23 and 1927-28. On certain questions of practice this was not possible, either because the items were not included in the questionnaires used in the two earlier years, or because they were not worded uniformly enough to yield comparable results.

The comparisons are not limited to exactly the same cities in the different years. It is assumed that the sampling of cities for each year was reasonably adequate and that, therefore, the comparisons between the different years are valid. There is, of course, some error due to the fact that some cities in each population group failed to report.

The figures given here for the 1927-28 survey are slightly different from those presented in the original report of that survey.[1] These differences are due primarily to the fact that in the original report the cities were classified according to population as given in the 1920 Federal census. For purposes of comparison in the present bulletin, however, the data for 1927-28 were recalculated with the cities grouped according to the 1930 census. This procedure seems justified on the ground that in 1928 the populations of most cities were probably much nearer to the 1930 census figures than to the 1920 census figures.

On the other hand, the figures presented here for the 1922-23 study are exactly the same as those originally reported.[2] In this case it appears likely that the 1920 census figures, which were used in the classification of cities in 1923, were much more applicable than the populations given in the 1930 census.

With these explanatory statements in mind, we may proceed to the comparison of the minimum educational qualifications required of newly appointed teachers in cities in 1927-28 and in 1930-31.

Trend of training requirements in city systems—Table 2 reveals a general increase in quantitative requirements in all population groups and in all three types of schools. This is especially marked in the percentage of cities requiring more than two years of college preparation for appointment in elementary schools. For all population groups combined this proportion increased from 12 percent in 1928 to 22 percent in 1931.

The increase is even more impressive with respect to the requirement of four or more years of college work for appointment in junior high schools. The percentage of cities having such a requirement jumped from 31 to 51 in the three-year period.

For teachers in senior high schools, where standards were already much higher than in the other two types of school, the increase is less striking. Among all cities reporting, the proportion requiring four or more years of training increased from 92 percent to 98 percent. Those requiring more than four years constituted only 3.5 percent in both years. Among cities over 100,000 in population, however, the proportion having a requirement of more than four years increased from 6 percent to 12 percent.

Effect of supply and demand upon standards—The data just presented indicate a marked tendency among city systems to raise quantitative training standards above two years for new elementary teachers, and a slight tendency to increase them above four years for new senior

[1] See: National Education Association, Research Division. "Practices Affecting Teacher Personnel." *Research Bulletin* 6: 205-56; September, 1928. Washington, D. C.: the Association.

[2] See: National Education Association, Salary Committee. *Report: Teachers' Salaries and Salary Trends in 1923.* Washington, D. C.: the Association, July, 1923. Chapter III, "Special Provisions Affecting Teachers' Salaries in the United States." p. 48-57.

high-school teachers. These tendencies have undoubtedly been facilitated by the marked increase in the output of our teacher-training institutions within recent years. There is by no means a surplus of well-qualified teachers for the nation as a whole; rather there is still a shortage, but the number appears to be increasing. Moreover, in many states there evidently is a serious oversupply of persons with teaching certificates. While this oversupply is unfortunate in itself and should be largely eliminated if possible, it perhaps signifies a condition which augurs well for the schools and the profession of teaching. It means that larger numbers of persons are more eager to enter teaching than formerly, and that standards of admission can probably be raised more rapidly than before without creating such a shortage as to cripple the schools. This applies to some extent in school systems of all sizes, but particularly in rural areas and small villages where minimum training requirements are still below the level recommended by the majority of experts.

In this connection Evenden makes this statement:

> With better salaries more people are not only willing, but eager to teach and those who are teaching are less willing to stop. As a result there is a distinct oversupply of teachers in many of our states with no promise of improvement in the near future. The increased supply and the increased competition make this the most logical time imaginable either to lower salaries or to increase standards. Since one or the other of these courses is inevitable it seems fitting that this Association should concern itself with the important problem of seeing that our public school system shall not lose any of its gains and that boards of education facing the alternatives just mentioned will be able to secure for the salaries now being paid teachers with more and better training than ever before.[1]

Need for higher qualitative standards for admission—The foregoing discussion of training requirements does not imply that good teachers are produced simply by successfully completing so many years of college work, irrespective of its type and quality. There is an increasingly widespread feeling that the program of study for prospective teachers should be centered around the purposes and ideals of teaching, and that a teacher should be prepared specifically for the field of teaching in which he is to engage. No longer do competent authorities assume that a person trained for high-school teaching is automatically prepared equally well for elementary teaching. Nor

[1] Evenden, E. S. "Changing Standards." *Ninth Yearbook*. American Association of Teachers Colleges. Washington, D. C.: National Education Association, 1930. p. 51.

TABLE 2.—COMPARISON OF EDUCATIONAL QUALIFICATIONS REQUIRED OF NEWLY APPOINTED TEACHERS IN 1927-28 AND 1930-31

Amount of training required beyond high-school graduation	Percent of cities requiring certain qualifications											
	Cities over 100,000 in population		Cities 30,000 to 100,000 in population		Cities 10,000 to 30,000 in population		Cities 5,000 to 10,000 in population		Cities 2,500 to 5,000 in population		All cities reporting	
	1928	1931	1928	1931	1928	1931	1928	1931	1928	1931	1928	1931
1	2	3	4	5	6	7	8	9	10	11	12	13
Elementary schools:												
Two or more years	97.6	100.0	94.9	98.4	92.7	98.4	92.8	96.6	88.0	94.5	92.0	97.0
More than two years	15.5	35.7	14.7	31.0	12.3	20.1	11.0	21.5	10.0	18.2	11.8	22.3
Number of cities reporting	84	84	177	187	399	396	401	414	391	401	1452	1482
Junior high schools:												
Four or more years	52.2	72.5	45.5	66.5	30.2	54.6	26.4	45.1	25.1	39.9	31.1	50.8
Number of cities reporting	69	69	145	164	328	337	318	333	299	318	1159	1221
Senior high schools:												
Four or more years	93.1	97.7	94.1	97.8	91.0	97.6	92.6	98.2	91.1	98.9	92.0	98.1
More than four years	5.7	11.8	7.1	6.7	3.7	3.9	2.9	2.7	1.7	.8	3.5	3.5
Number of cities reporting	87	85	169	178	379	380	376	382	361	373	1372	1398

Read table as follows: Of the 84 cities over 100,000 in population which reported their minimum training requirements for newly appointed elementary teachers in 1927-28, 97.6 percent required 2 or more years beyond high-school graduation, while 15.5 percent required more than 2 years. Of the 84 cities in the same population group which reported on this question in 1930-31, 100 percent require 2 or more years beyond high-school graduation, while 35.7 percent require more than 2 years. Similarly read the figures for other teacher and population groups.

should teachers well trained for handling one or two specific subjects in high school be expected to teach other unrelated subjects effectively. Thus far, however, authorities are far from complete agreement concerning what elements should constitute the training program for teachers in any specific field. The desirable types and relative amounts of academic work on the one hand, and of strictly professional study on the other, are still highly controversial questions.

Concerning the present standards for admission to high-school teaching, Bachman says:

> Graduation from a standard college is, however, at best only a quantitative measure and sheds little light on what the needed preparation of a high-school teacher should be. . . . Indeed, so general are present-day graduation requirements for the usual academic degrees that it is next to impossible to tell what a graduate from any given academic college has studied, without examining the transcript of the work of the given student. . . .
>
> As a mere quantitative standard college graduation is all that can at present be imposed by most states on all new high-school teachers, but to accept graduation from an academic college longer also as a qualitative standard is to ignore the fact that high-school teaching is becoming more and more specialized and increasingly exacting as to specific preparation, no less for academic than for special high-school teachers.[1]

With respect to this problem of academic preparation the great standardizing agencies, such as the North Central Association and the Southern Association, have offered no solution beyond requiring that "all teachers of academic subjects in new schools and all new teachers of academic subjects in accredited schools must teach in the fields of their major or minor specialization in college preparation. A minor is interpreted as consisting of a minimum of ten semester hours."[2] Although a few states have requirements higher than this for their highest grade high-school teachers' certificates, 27 make no academic requirement except graduation from a recognized college, and in eight others the subjectmatter requirements are very low.[3]

With respect to strictly professional preparation, much has been accomplished both by the accrediting associations and by the states; yet a great deal remains to be done. Bachman continues:

> The requirement of twelve to fifteen semester hours of professional preparation of high-school teachers by great regional accrediting associations shows what is deemed practical under present conditions. It is, however, not to be inferred that this represents either a desirable or ideal amount of such preparation. Nevertheless, the general character of the work recommended by the North Central Association is suggestive.[4]

Thirty-three states now require between 15 and 18 semester hours of professional education for the highest grade of academic high-school teacher's certificate. In the other fifteen states the requirement runs as low as five and as high as 24 semester hours. In only four states, however, is all of this work carefully prescribed as to the specific subjects that must be studied and the approximate amount of credit allowed in each.[5]

Need for research—Competent opinion based on mature experience and common practice is probably the best guide available on these issues to date. As yet research has little conclusive evidence to offer as an aid to those responsible for determining the amount and kind of training to be required of prospective teachers. The attempts at scientific work in this field are encouraging and should eventually yield results of great significance to school administrators, teacher-training officials, and teachers.

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[1] Bachman, Frank P. *Training and Certification of High School Teachers.* Nashville, Tennessee: Division of Surveys and Field Studies, George Peabody College for Teachers, 1930. p. 11 and 14.
[2] Brown, Charles C. "Proceedings of the Commission on Secondary Schools." *North Central Association Quarterly* 4: 80; June, 1929.
[3] Bachman, Frank P. *op. cit.* p. 16-17.
[4] *Ibid.*, p. 15.
[5] *Ibid.*, p. 18-20.

Experience Requirements for Newly Appointed Teachers

Since every teacher must begin teaching somewhere without previous experience, the question of experience requirements for newly appointed teachers is of limited application. Consequently writers in the field of teacher personnel have given it only incidental consideration. The principal argument in favor of such requirements is that school districts which can afford to pay the higher salaries are entitled to the superiority in teaching service which the right kind of experience often brings.

On the other hand, there are two important arguments against such requirements. First, the cream of the experienced personnel in the smaller and less wealthy areas is taken by the larger and wealthier centers. This process is perhaps inevitable to a certain extent so long as school districts, like persons, are permitted to operate on a highly individualistic basis economically. Inequalities in financial ability mean differences in the power to buy superior educational service just as surely as they mean differences in the power to buy food, shelter, and luxuries. Such inequalities are characteristic of American life, and in practice they have been sanctioned by the people. Nevertheless, we have a theory that education is a function of the state, to be conducted for the greatest good of all the people. If this theory is sound, it is difficult to see any fundamental justification for the concentration of experienced teachers in a relatively few centers.

A second objection to such requirements for all new teachers is that the benefit accruing to the school system from one or two years of teaching experience elsewhere is often small. Practice does not make perfect unless it is the right kind of practice. For this reason, experience in ill-equipped or poorly supervised schools does not necessarily add to a teacher's skill. Moreover, experience in teaching third-grade pupils or ninth-grade English may contribute little to the fitness of a person to teach social science in the high school. Of course such experience is often better than none, but it probably is not as valuable as is frequently supposed. Rather than select a teacher whose previous experience has been outside the scope of his prospective position, the school authorities might better appoint an inexperienced recruit with excellent training, and let him obtain his first experience under competent supervision in the field he is expected to teach.

The solution of this problem doubtless lies partly in giving prospective teachers a type of training which includes an adequate amount of observation and practice teaching under careful guidance. When such work is required of all students in institutions for the preparation of teachers, there will be less need for experience requirements even in school districts which try to maintain unusually high standards. Competent administration and supervision in the school system itself are, of course, vital factors in making experience requirements unnecessary.

Present practice in city school systems—Table 3 reveals the extent to which previous experience is required of newly appointed teachers in the cities reporting in 1930-31. The main points of the table may be summarized thus:

1. For appointment in elementary schools 58 percent of all the cities reporting require no previous teaching experience, while 42 percent require at least one year. The proportion requiring no experience varies from 53 percent among cities of 10,000 to 30,000 population to 66 percent among cities over 100,000. There appears to be little relationship between the size of cities and their practice on this point. The largest and smallest population groups both have a relatively high percentage of cities without experience requirements for new elementary teachers.

2. For appointment in junior high schools only 47 percent of the cities reporting require no previous experience, while 53 percent require at least one year. The proportion without such a requirement ranges from 41 percent in cities over 100,000 to 55 percent in cities of 2,500 to 5,000 population.

3. For appointment in senior high schools also, 47 percent of all the cities have no experience requirement. This percentage varies from 28 in cities over 100,000 to 64 in those of 2,500 to 5,000 population. Here a striking inverse relationship is evident between size of cities and their practice with respect to new teachers in senior high schools.

4. In nearly all population groups experience requirements are considerably more common with respect to high-school teachers than in the case of elementary teachers. Among the cities having such requirements, two years of experience are most frequently stipulated in all population groups and for all types of schools. A considerable number of cities require only one year of experience; very few require more than two years.

In considering the data of Table 3 it should be borne in mind that a number of cities reporting no experience requirements stated that this applies only to persons of superior training. For example, a city may not demand previous experience of an elementary teacher with three or four years of training, but may require it of a teacher with only two years of preparation. Such cases, however, appear to be the exception rather than the rule. In Table 3 they are tabulated under the "no experience" heading.

Trend of practice since 1922-23—No sweeping statement appears to be warranted concerning changes in the matter of experience requirements during the past eight years. This conclusion is reached by comparing the results of this study with those of the investigation made by the Research Division in 1923.[1] Among the cities over 100,000 the tendency seems to be away from requiring experience of new teachers in all three types of schools. During this period the percentage of such cities requiring some experience dropped from 51 to 34 for elementary teachers, from 74 to 59 for junior high-school teachers, and from 82 to 72 for senior high-school teachers. Among all other population groups there seems to have been a slight increase in the proportion requiring experience for appointment in senior high schools. In these same population groups (under 100,000), both increases and decreases are found with respect to the requirements for elementary and junior high-school teachers, but most of these differences are small.

A reasonable degree of caution must be observed in interpreting these comparative figures, because the sampling of cities in the 1931 study was considerably larger than in the survey of 1923.[2]

[1] National Education Association, Salary Committee (E. S. Evenden, Chairman). *Report: Teachers' Salaries and Salary Trends in 1923.* Washington, D. C.: the Association, July, 1923. p. 48-49.

[2] For an explanation of the assumptions and methods involved in the comparison of data for 1931, 1928, and 1923, see page 9 of this bulletin.

TABLE 3.—EXPERIENCE REQUIREMENTS FOR NEWLY APPOINTED TEACHERS IN 1930-31

Number of years experience required	Cities over 100,000 in population		Cities 30,000 to 100,000 in population		Cities 10,000 to 30,000 in population		Cities 5,000 to 10,000 in population		Cities 2,500 to 5,000 in population		All cities reporting	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7	8	9	10	11	12	13
Elementary schools:												
No experience	56	65.9	113	60.8	207	52.8	236	58.0	248	62.0	860	58.5
One year	9	10.6	34	18.3	79	20.1	70	17.2	72	18.0	264	18.0
Two years	20	23.5	38	20.4	99	25.3	99	24.3	73	18.3	329	22.4
More than two years	.....	.....	1	.5	7	1.8	2	.5	7	1.7	17	1.1
Total	85	100.0	186	100.0	392	100.0	407	100.0	400	100.0	1470	100.0
Junior high schools:												
No experience	28	40.6	75	46.0	141	42.4	152	47.4	171	54.8	567	47.3
One year	11	15.9	36	22.1	72	21.6	57	17.8	55	17.6	231	19.3
Two years	26	37.7	47	28.8	109	32.7	103	32.0	74	23.7	359	30.0
More than two years	4	5.8	5	3.1	11	3.3	9	2.8	12	3.9	41	3.4
Total	69	100.0	163	100.0	333	100.0	321	100.0	312	100.0	1198	100.0
Senior high schools:												
No experience	24	28.2	56	31.5	154	41.0	186	48.8	238	64.1	658	47.3
One year	11	12.9	42	23.6	79	21.0	68	17.8	46	12.4	246	17.7
Two years	44	51.8	75	42.1	118	31.4	116	30.5	73	19.7	426	30.6
More than two years	6	7.1	5	2.8	25	6.6	11	2.9	14	3.8	61	4.4
Total	85	100.0	178	100.0	376	100.0	381	100.0	371	100.0	1391	100.0

Read table as follows: Of the 85 cities over 100,000 in population which reported concerning experience requirements for newly appointed elementary teachers, 56, or 65.9 percent, do not require any experience; 9, or 10.6 percent, require 1 year of experience, etc. Similarly read data for other teacher and population groups.

This tabulation is based on the replies to question 2 of the inquiry blank reproduced on page 30.

Employment of Married Women as Teachers

Should married women be employed as new teachers? Should single women teachers who marry be permitted to continue in their positions? These questions have been the subject of much discussion and some research.

Wide differences of opinion—There is a rather sharp cleavage of opinion on these questions among both educators and laymen. Although much of this opinion can hardly be characterized as expert, it deserves consideration as a means of illuminating the problem and of helping school authorities see and avoid the fallacious reasoning in which many discussions of the subject become entangled. Lewis devotes an entire chapter to this problem.[1] He lists 31 arguments for, and 31 against the employment of married women teachers. Some of these are patently absurd or trivial, and many are only slight modifications of others in the list.

Arguments against married women as teachers—Most of the arguments against the employment of married women which merit consideration may be grouped under three heads, as follows:

1. *Married women who teach cannot give the necessary attention and care to their homes and families.* It is frequently argued that motherhood is the first duty of women and that nothing should be allowed to interfere with it. Employment of mothers outside the home robs their children of the care to which they are entitled. It is asserted, moreover, that the state stands to benefit more by having children well cared for in the home, even if this results in some loss of efficiency in the school. The training of teachers is not wasted when they leave teaching to make a home because this training is highly useful to them in rearing the next generation. Finally, it is assumed that the proper care of a home and family takes a woman's full time. For these reasons a married woman's place is said to be in the home and not in the schoolroom.

2. *Married women in general are less efficient and less satisfactory as teachers than are single women.* It is contended that married women teachers are usually too preoccupied with home interests to give their best efforts to the school. They teach only for the money, or if they do not especially need the money, they feel more independent of educational authority and are not willing to assume their share of responsibility in the school. Furthermore, they either do not have time or are unwilling to obtain additional professional training. They tend to stagnate professionally. Finally, even when they are obviously inefficient, it is difficult to remove them. Often they are persons of local residence, and the pressure of public opinion plus the influence of friends and relatives keep the school authorities from handling them according to the best interests of the school system.

3. *In the employment of teachers, persons who are dependent upon themselves for support should be given preference over those who have other means of support.* Most married women have husbands who can support them, whereas the single woman must depend upon her own earnings. Hence the schools should use single women so long as the supply of competent ones lasts. This argument appeals strongly to many laymen, particularly in times of business depression and consequent unemployment among many groups, including teachers. It is felt that the married woman usually does not need money except for luxuries, and that in working she is really taking some more needy person's job. This attitude is especially common in regard to employment in the public service. The notion still persists that work which is financed by the public should be given to the persons who need it most.

Arguments in favor of married women as teachers—Those who support the policy of employing married women as teachers begin by rejecting the arguments advanced against the policy as largely irrelevant or without foundation in fact. They then appeal to a more vital consideration, contending that school boards should constantly strive to attract and retain efficient teachers and to eliminate inefficient ones, and that this principle should be applied impartially to all teachers, whether married or unmarried. The principal argu-

[1] Lewis, E. E. *Personnel Problems of the Teaching Staff*. New York: Century Company, 1925. Chapter X, "The Problem of the Married Woman Teacher." p. 173-89.

ments on this side of the question may be summarized as follows:

1. *There is no evidence that married women teachers in general are unable or unwilling to devote sufficient attention to their homes and families.* Modern methods and conveniences in the home make it unnecessary for a wife to spend full time at housework and related duties. The problem of childbirth among married women teachers can be handled by granting leaves of absence during critical periods. Teaching provides mental and cultural stimuli, together with an increased opportunity to understand children, which should be valuable to the mother in providing a wholesome environment for her own children. Moreover, it is extremely doubtful that the school should set itself up as an agency to determine the proper organization of the home. The woman teacher who remains childless though married may perhaps serve society better by teaching well a group of school children than by rearing children of her own. Finally, even if a considerable proportion of married teachers were neglectful of their families, that fact would not constitute a reasonable excuse for barring those who are not.

2. *There is no evidence that married women in general make poorer teachers than single women.* In fact, it is often contended that married women generally make the better teachers. Many of them, being economically independent, teach solely because of love for the work. Moreover, those who have children of their own often have a more intelligent interest in children and are better fitted by experience to handle them. At least, a good teacher with children of her own usually has something to contribute to education which an unmarried teacher does not. Moreover, with respect to occasional absences from duty, it is better for the pupils to be under a substitute teacher for a time than to have excellent and attractive teachers leave the system because of marriage. Finally, one of the strongest arguments is that the inefficiency of some married women teachers is not a logical reason for discriminating against all of them.

3. *The school is not an agency to provide employment for needy persons with teaching certificates.* The school should employ a sufficient number of competent teachers to perform well the task assigned to it, namely, the education of children. Its appointments should ignore the relative economic needs of applicants for positions, except perhaps when the professional qualifications of the applicants are approximately equal. The fact that many married women teachers have husbands capable of supporting them has no fundamental bearing upon efficiency of instruction in the school. Moreover, there are doubtless many families in which the husband does not earn enough to support his family at a comfortable standard of living. Women are increasingly recognized as having a place in the economic and professional world, and have a right to assume their fair share of the financial responsibility for a family.

Opinion in educational literature—Most of the opinion on this subject in educational literature is opposed to discrimination against married women teachers as a class. In a careful analysis of the problem Reeves makes the following statements:

> Such married teachers as are inefficient or lack professional training should, of course, be excluded. But this applies to unmarried teachers as well.... It seems plausible to suppose a rule that will eliminate the inefficient and non-professional unmarried teacher should be sufficient, if applied, to eliminate the inefficient and non-professional married teacher without resorting to a special rule against married teachers as a class. . . .
>
> It should be possible adequately to protect the schools against interruptions due to pregnancy without exclusion of the whole class of married women. Would not a simple clause in the married woman's contract providing that contracts become void in case of pregnancy be as successful in meeting the objections to their services as the rule providing that contracts shall become void in case of marriage? Such provision would save excellent married teachers for the school and would operate to cause fewer interruptions in the middle of the term than the voidance of contracts in case of marriage. . . .
>
> Any provision for the employment of married women teachers who depend upon their own efforts for the support of themselves or a family, while excluding married women teachers, equally well or better qualified, who have a husband to support them, is clearly opposed to the interest of the school. Such a provision would never be tolerated in any efficiently managed industry. It is even more important that it not be tolerated in a school system, the product of which is the educational condition of the next generation of Americans.[1]

[1] Reeves, Charles E. "Why Discriminate Against Married Teachers?" *Nation's Schools* 2: 53-6; September, 1928.
See also: Reeder, Ward G. *The Fundamentals of Public School Administration.* New York: Macmillan Co., 1930. p. 70.

In another article Reeves lists nine different ways of handling the married-teacher problem. Most of these he believes are undesirable.[1]

1. An ironclad rule excluding all married women from service as teachers in the schools. Few boards of education, even those making rules against the employment of married women teachers, go to this extreme.

2. An ironclad rule excluding all married women not employed as teachers at the time of the passage of the rule. This seems to be the form the rule against employment of married women teachers usually takes. . . .

3. The temporary rule against employment of married women teachers. The object here is to keep a balance between the two groups of teachers. . . .

4. The use of married women, usually former teachers, as substitutes. . . .

5. Discrimination against all married women except such as are dependent upon their own efforts for support. . . .

6. The employment of some married teachers, but the giving of preference to unmarried ones. . . .

7. Reserving the right, in the teacher's contract, to demand the resignation of any woman teacher who marries during the period of her contract. . . .

8. No regulations concerning the employment of married women teachers. This is probably still the practice in the great majority of school systems. . . .

9. The placing of married women upon the same basis as unmarried women both as to selection and tenure, having the requirements for both classes sufficiently rigid to exclude those who are inefficient or undesirable. . . . .

Ewing, writing in *Harper's Monthly Magazine,* sees the married-teacher question as part of a larger one involving the traditional restriction of personal freedom among teachers. He says:

It is surprising that so little has been said in defense of the school teacher and her right to live her own life. For it is a lamentable fact that in any number of communities the public school teacher no more dares call her soul her own out of the schoolroom than she does in it. If she dresses too youthful, if she has too many "dates," . . . . in short, if her social behavior is at all out of the ordinary, she lays herself open to censure, or perhaps even dismissal when her year's contract expires. And finally, if she commits the indiscretion of marrying, she is more than likely to become *persona non grata.*[2]

On this point Reeves comments as follows:

The argument that married women should be excluded from teaching because of tradition is hard to answer, simply because it is not based upon reason. If the tradition of a city demands that married teachers shall not be employed, one can well sympathize with a board of education that tries to carry out its community's desires. . . . However, the board of education should ascertain definitely whether the tradition of the community really does demand that all teachers be unmarried or whether the demand is merely a loud expression by a few self-interested persons in the community. When tradition is the only reason for exclusion of married women teachers, a campaign should be inaugurated to wean the public from such an unreasonable attitude.[3]

After opposing discrimination against married women on several grounds, Ewing's article emphasizes the social and economic loss to society which this policy often involves:

But the most cogent argument of all has not yet been mentioned, and that is that our public schools cannot afford to sacrifice teachers who have had extensive training and experience if the latter are willing to continue to serve the community. Indeed, such teacners represent a social investment, for they have been trained by the normal schools and universities, institutions supported by the state or by private endowment, and as beginners they have gained their experience at the expense, let us say, of the public schools themselves. An analogous situation arises when young women doctors, who have been trained by medical schools at great expense to the latter, marry and give up their profession—to the horror of the leaders of the profession, for they, being wiser than our school heads, realize what an enormous loss is involved. Experience and training in any profession are the ultimate criteria and can hardly be affected by the married or unmarried status of the individual.[4]

The attitude of parents—A few years ago in Washington, D. C., the employment of married women as teachers was made the subject of a city-wide discussion and referendum.[5] It had been suggested that the policy of employing such teachers be modified. Accordingly the superintendent of schools made the following recommendation:

Since this question originated with the citizens and since it is a social problem affecting home life, as well as an administrative and educational problem, the superintendent is of the opinion that the matter should be thoroughly discussed by the public before any final conclusion can be reached regarding what, if anything, should be done.

The Parent-Teacher Associations and various civic groups of the city were then furnished with information concerning the policy of the Board, and were given an opportunity to

[1] Reeves, Charles E. "Should the Married Woman Teacher Be Disqualified?" *Nation's Schools* 2: 13-18; October, 1928.
[2] Ewing, Stephen. "Blue Laws for School Teachers." *Harper's Monthly Magazine* 156: 329-38; February, 1928.
[3] Reeves, Charles E. *op. cit.*
[4] Ewing, Stephen. *op. cit.*
[5] *Report on the Referendum on Married Women Teachers in the Public Schools.* Board of Education of the District of Columbia, Washington, D. C. December 21, 1927. (Mimeographed) 12 p.

study, discuss, and vote upon the question. The vote from 70 organizations was as follows:

Favoring married women as public school teachers and as normal school students	57
Opposed to the above policy	7
Non-committal ("Let the board decide," etc.)	6
Total	70

The most frequent reason given for the votes favorable to married women was that efficiency or merit and not the marital status of a teacher should be the guide.

Surveys of opinion among educators—In the absence of conclusive data as to the relative efficiency of teachers, competent superintendents of schools are perhaps best qualified to judge the desirability and practicability of employing married women in the schools. In 1926 the *American Educational Digest* presented a survey of opinion on the subject, based on the questionnaire responses of 954 superintendents.[1] One question was: Are married women with equal training and experience as efficient as unmarried? The replies were as follows:

Married women equally efficient	597 or	63 percent
Married women less efficient	174 or	18 percent
Married women more efficient	42 or	4 percent
Conditional	141 or	15 percent
Total	954 or	100 percent

In a later questionnaire study, McGinnis found considerable difference between the opinions of superintendents on this question and the policies of their boards of education.[2] Of 255 superintendents in cities of 25,000 population or more, 60 percent stated that where women teachers are not on permanent tenure the board's policy is not to re-elect those who marry while in service, while 36 percent stated that the board has no such policy, and 4 percent failed to answer. In contrast, only 39 percent of these superintendents expressed the opinion that the displacement of successful women teachers when they marry is a good administrative policy, 52 percent believe it to be a poor policy, and 9 percent failed to answer, or stated that they are undecided.

McGinnis's study also showed that of 146 professors of education answering a separate questionnaire, only 12 percent gave the opinion that discrimination against married teachers is a sound educational policy, 86 percent believe that it is not a sound policy, and 2 percent omitted the question.

Following are a few typical excerpts from letters received from educators who participated in the foregoing study:

1. I have always felt that the only standard upon which a teacher should be retained in the school system is that of efficiency and ability and willingness to do good schoolroom work. It is not the question as to whether the teacher is married or unmarried, but more a question of her general attitude and her real worth to the school system. I, therefore, have in my school system married women who are regarded as the best teachers of my teaching corps. No one has objected to their presence in the classroom; neither has there been any objection on the part of the board of education, principals, and supervisors to increasing the salaries of these teachers to the super-maximum limit.

2. As superintendent of schools I know that the married woman teacher is a source of friction. As a rule they are not among my best teachers. The present rule against them has increased the efficiency of this system.

3. I am convinced that other things being equal, the married woman teacher is the better teacher. The argument that the married teacher has more outside interests does not agree with the facts. The young, unmarried teacher's principal interest is marriage expectancy, and it is a constant, active, and time-consuming interest, as it should be. The married woman teacher has less outside interests that interfere with her teaching than the unmarried one. A policy of granting leave of absence for maternity cases overcomes the tendency for childless marriages.

4. A teacher should be selected on the basis of her ability to teach. I do not see that other factors should enter into the matter. If I were to choose a teacher, however, I think that if I found two teachers of equal merit, one married and the other single, I would likely give the preference to the one who was single, but to say arbitrarily that married teachers should be released merely on the basis of marriage seems to me a very poor argument.

Studies of relative efficiency—Although there is plenty of opinion on the question of employing married women as teachers, little scientific evidence is available concerning the relative teaching efficiency of married and unmarried women.

Lewis reports a study in Detroit by Moehlman of the relative teaching efficiency of these two groups of teachers.[3] The conclusion was

[1] "Employing Married Women in the Schools." *American Educational Digest* 46: 57; October, 1926.
[2] McGinnis, W. C. "The Married Woman Teacher." *School Executives Magazine* 50: 451-53; June, 1931.
[3] Lewis, E. E. *Personnel Problems of the Teaching Staff*. New York: Century Co., 1925. p. 179-80.

that married women teachers as a group ranked a little higher than the general average of all women teachers, according to the ratings given them by principals. The same investigation led to two other tentative conclusions which are pertinent: (1) that teaching by married women did not decrease the number of children in the families below the general average; and (2) that the ratings of women teachers in service both before and after marriage were generally somewhat higher after marriage.

Carrothers collected data bearing upon the physical efficiency of teachers in Cleveland.[1] He found that married women teachers were subject to more illness, on the average, than were single women teachers. The differences between the two groups, however, as shown in Table 4, were not large. It hardly seems probable that such small differences would affect significantly the relative efficiency of teachers in the classroom.

TABLE 4.—ILLNESS PER YEAR AMONG SINGLE AND MARRIED WOMEN TEACHERS IN CLEVELAND, 1922-23[1]

Ages of teachers	Single women		Married women	
	Number	Average days of illness	Number	Average days of illness
21-30	1,180	5.2	141	7.8
31-40	921	5.0	200	6.1
41-50	525	4.7	128	6.3
51-70	322	4.7	61	5.4
All	2,948	5.1	533	6.6

[1] Adapted from data in *The Physical Efficiency of Teachers*, by George E. Carrothers, 1924. p. 35.

Goodier studied a group of 95 women teachers with respect to (1) the number of days of absence per year, and (2) the number of teachers pursuing additional courses at educational institutions. Data concerning absence during the five years from 1923 to 1928 led him to conclude:[2]

1. Married teachers were absent more than unmarried teachers in four of the five years. In two of the years . . . the amount was about double.

2. With the exception of one year, the amount of absence due to personal illness did not differ materially in the two groups.

3. The really significant figures . . . . relate to absences for reasons other than personal illness. Without exception, the married teachers missed school from three to seven times as much as those teachers who were not married.

The same study revealed that in the year 1926-27, 24 out of 80 unmarried women teachers continued their work at higher educational institutions, while only one of 15 married women did so. In 1927-28 the corresponding figures were 31 out of 78 single women, and only one out of 17 married women.

The evidence presented in the foregoing studies does not warrant any final conclusions as to the relative efficiency of single and married women teachers as groups. The measurement of teaching efficiency has not yet been developed to the point where highly reliable and valid comparisons of this sort can be made. However, from the viewpoint of those who oppose discrimination against married women as a class, no amount of scientific research comparing groups of single women teachers with groups of married women teachers will ever give a satisfactory answer to the problem. Such persons contend that no matter what the results of such comparisons, every teacher should be handled according to her individual merits. They assert that whether she is married or single, and whether married teachers or single teachers are superior in general, are questions entirely beside the point.

Legal aspects of the married-teacher question—Apparently no state has passed any legislation with respect to married women as teachers. In at least six states[3] and the District of Columbia, however, decisions on the question have been handed down by the courts, the chief state school official, or the state board of education. Brubacher[4] and Allen[5] conclude from their analyses of these decisions that in these states marriage is not in itself a valid cause for dismissing a teacher who is under contract or who is teaching under a tenure law which permits dismissal only for specified causes. It is,

[1] Carrothers, George E. *The Physical Efficiency of Teachers*. Contributions to Education, No. 155. New York: Bureau of Publications, Teachers College, Columbia University, 1924. p. 34 and 76.

[2] Goodier, Floyd T. "Another Conclusion Regarding the Married Woman Teacher." *Nation's Schools* 2: 51-2; December, 1928.

[3] Indiana, Maryland, New Jersey, New York, Oregon, and West Virginia.

[4] Brubacher, John S. "The Judicial Status of Marriage and Maternity as an Obstacle to the Education of Women for Professional Careers in Public School Teaching." *School and Society* 26: 428-35; October 1, 1927.

[5] Allen, Ira M. *The Teacher's Contractual Status*. Contributions to Education, No. 304. New York: Bureau of Publications, Teachers College, Columbia University, 1928. p. 73.

of course, unsafe to assume that similar decisions would be made in the other states if cases of this kind should come up for adjudication.

The most recent decision on the subject was handed down on December 21, 1931, by the Maryland State Board of Education in response to an appeal from Wicomico County. The Board ruled that a woman teacher in the public schools of Maryland cannot be dismissed because she marries. It also stated that a clause in a teacher's contract reading, "If a female teacher marries in any school year she will be expected to resign at the close of the school year," is in plain conflict with the state tenure law. This law provides no basis for discrimination on account of sex or marital status.[1]

In 1927 Anderson found that teachers' contracts in cities of 18 states specified marriage as a reason for termination of the contract.[2] He points out that such a practice is contrary to the general court rule in states where decisions on the question have been handed down.

The decisions referred to here do not mean that a board of education cannot refuse to employ a married woman, or that it cannot refuse to reemploy her at the termination of her contract. On the other hand, when an unmarried woman is employed under conditions where just and reasonable cause must be shown prior to dismissal, marriage alone is not considered a satisfactory cause.

Present practice in city school systems—Table 5 shows the general policy of nearly 1,500 city school systems in 1930-31 with respect to (1) the employment of married women as new teachers, and (2) the retention of single women teachers who marry. Of

[1] "Educational Notes and News." *School and Society* 35: 15-16· January 2, 1932.
[2] Anderson, Earl W. *The Teacher's Contract and Other Legal Phases of Teacher Status.* Contributions to Education, No. 246. New York: Bureau of Publications, Teachers College, Columbia University, 1927, p. 117-18.

TABLE 5.—POLICIES CONCERNING EMPLOYMENT OF MARRIED WOMEN AS TEACHERS IN 1930-31

Policy	Cities over 100,000 in population		Cities 30,000 to 100,000 in population		Cities 10,000 to 30,000 in population		Cities 5,000 to 10,000 in population		Cities 2,500 to 5,000 in population		All cities reporting	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7	8	9	10	11	12	13
Married women employed as new teachers:												
Yes	26	31.3	44	23.8	80	20.3	97	23.6	98	24.6	345	23.4
No	57	68.7	141	76.2	315	79.7	314	76.4	301	75.4	1128	76.6
Total	83	100.0	185	100.0	395	100.0	411	100.0	399	100.0	1473	100.0
Single women teachers who marry:												
Required to resign at once	26	31.3	73	39.5	156[3]	39.8	117	28.7	115	28.9	487	33.2
Required to resign at end of school year	8	9.7	42	22.7	105	26.8	142	34.8	121	30.4	418	28.5
May continue to teach	47[1]	56.6	69[2]	37.3	129[4]	32.9	143[5]	35.0	156[6]	39.2	544	37.1
May continue to teach or are required to resign at option of board	2	2.4	1	.5	2	.5	6	1.5	6	1.5	17	1.2
Total	83	100.0	185	100.0	392	100.0	408	100.0	398	100.0	1466	100.0

Read table as follows: Of the 83 cities over 100,000 in population reporting on this question, 26, or 31.3 percent, employ married women as new teachers; 57, or 68.7 percent, do not employ married women as new teachers. Of the 83 cities over 100,000 in population reporting as to their policy concerning single women teachers who marry, 26, or 31.3 percent, require resignation at once; 8, or 9.7 percent, require resignation at end of school year; 47, or 56.6 percent, allow teachers to continue in service; and 2, or 2.4 percent, leave this to the option of the board in each case. Similarly read data for other population groups.

This tabulation is based on replies to questions 4 (a) and (b) of the inquiry blank reproduced on page 30.

[1] Nine of these reported that women teachers who marry may continue teaching if employed for permanent service; otherwise they must resign.
[2] Ten of these reported that women teachers who marry may continue teaching if employed for permanent service; otherwise they must resign.
[3] Two of these reported that women teachers who marry must resign at once but may later be reinstated.
[4] Fifteen of these reported that women teachers who marry may continue teaching if employed for permanent service; otherwise they must resign.
[5] Nine of these reported that women teachers who marry may continue teaching if employed for permanent service; otherwise they must resign. Two reported that women teachers who marry may continue to teach provided they do not marry during the school year.
[6] Three of these reported that women teachers who marry may continue teaching if employed for permanent service; otherwise they must resign.

the cities reporting in all population groups, about 77 percent do not employ married women as new teachers. The figures vary from 69 percent in cities over 100,000 to 80 percent in cities of 10,000 to 30,000 in population. No definite relationship is apparent between the size of cities and their practice on this point.

The lower section of Table 5 reveals that only 37 percent of all cities reporting permit single women teachers to continue teaching after marriage, and a number of these permit it only in case of teachers who have been elected for permanent service. More than one-half of the remaining 63 percent require women teachers to resign at once if they marry, while nearly as many require their resignation at the close of the school year. In a mere handful of cities the rules make it optional with the school board in each case as to whether the teacher may continue or is required to resign.

Trend of practice in recent years[1]—A comparison of the results in this study and the one made by the Research Division in 1928 indicates a marked decrease in the consideration given to married women as teachers by city school boards. This decrease occurred in all population groups, but the greatest differences occurred in the groups of smaller cities. Table 6 shows that the proportion of cities over 100,000 employing married women as new teachers decreased from 40 percent in 1928 to 31 percent in 1931, while the corresponding proportion of cities 2,500 to 5,000 in population decreased from 47 percent to 25 percent in the same period. For all cities combined, the percentage dropped from 39 to 23.

Decreases also occurred in all but the largest population group with respect to the percentage of cities retaining single women who marry, although these decreases were smaller than those referred to in the preceding paragraph. For all population groups combined, the percentage dropped from 49 in 1928 to 37 in 1931. Both in 1928 and in 1931 the percentages of cities retaining single women who marry were higher than the percentages of cities employing married women as new teachers.

Leaves of absence for maternity—A number of school systems have adopted leave-of-absence provisions governing cases of maternity among married women teachers. These plans recognize the desirability of retaining successful married women in the schools, even after they have acquired children. Such provisions are designed, however, to meet the usual objections to permitting a woman to remain in the classroom after pregnancy becomes evident and while the child still needs most of her attention.

[1] See page 9 for explanation of the assumptions and methods involved in the comparison of data for different years.

TABLE 6.—COMPARISON OF POLICIES REGARDING EMPLOYMENT OF MARRIED WOMEN AS TEACHERS IN 1927-28 AND 1930-31

Policy	Cities over 100,000 in population		Cities 50,000 to 100,000 in population		Cities 10,000 to 30,000 in population		Cities 5,000 to 10,000 in population		Cities 2,500 to 5,000 in population		All cities reporting	
	1928	1931	1928	1931	1928	1931	1928	1931	1928	1931	1928	1931
1	2	3	4	5	6	7	8	9	10	11	12	13
Employing married women as new teachers:												
Number of cities	35	26	58	44	145	80	155	97	190	98	583	345
Percent of cities	39.8	31.3	32.6	23.8	35.5	20.3	37.3	23.6	46.9	24.6	39.0	23.4
Total number reporting	88	83	178	185	409	395	416	411	405	399	1496	1473
Retaining single women who marry:												
Number of cities[1]	50	47	78	69	192	129	199	143	209	156	728	544
Percent of cities	56.8	56.6	44.8	37.3	47.2	32.9	48.4	35.0	52.4	39.2	49.2	37.1
Total number reporting	88	83	174	185	407	392	411	408	399	398	1479	1466

Read table as follows: Of the 88 cities over 100,000 in population which reported their policies concerning the employment of married women as new teachers in 1927-28, 35, or 39.8 percent employed married women as new teachers. Of the 83 cities in the same population group which reported on this question in 1930-31, 26, or 31.3 percent employ married women as new teachers. Similarly read figures for other population groups and for the question of retaining single women who marry.

[1] These figures do not include cities reporting that single women who marry may be either retained or dismissed at the option of the school board.

Regulations governing maternity leave usually require that the teacher remain away from duty for a considerable period, and allow her no pay during the absence. Sometimes they are included in general plans governing all types of voluntary absence without salary. Following are excerpts from the regulations of certain school systems which grant maternity leave:

Minneapolis, Minnesota

Any person teaching in the Minneapolis Public Schools, whether regular or substitute, must be absent from school service four months before maternity, and for one year after maternity. Written notice of the approach of maternity must be given by the teacher at least six months before the birth of the child. Death of the child within the year may terminate the leave, and the teacher may be reemployed, if there is a position to which she can be appointed with advantage to the service.[1]

Long Beach, California

a. The conditions upon which leaves of absence are granted are:
   (1) That the teacher has served successfully for at least four years in the Long Beach schools.
   (2) That the leave of absence is requested for one or more of the following reasons:
      (a) Advanced professional and academic training.
      (b) Travel in foreign countries.
      (c) Rest and recreation.
      (d) Maternity.

b. No leave of absence is granted for more than one year, except in the case of maternity, when the leave of absence shall be for two years.

c. A teacher, principal, head of department, director, or supervisor, absent on leave, is given assurance by the Board of Education that upon expiration of the leave, he will be assigned to a position which is the same as or similar to the one held when the leave of absence was granted; provided the Superintendent of Schools is notified on or before the first day of June by said teacher, principal, head of department, director, or supervisor, that it is his intention to return to the service for the next ensuing school year.

d. That upon his return any member of the teaching force who has been absent on leave for professional and academic training shall be given credit on the salary schedule the same as if he had remained in continuous service.[2]

District of Columbia

1. Any married woman employed by the Board of Education who shall become pregnant and shall have advanced to the beginning of the fourth calendar month of pregnancy shall request leave of absence and shall be placed upon leave without salary until the child shall have reached the age of nine months.

2. Such leave of absence when granted by reason of pregnancy may be terminated by the Board of Education upon application by the employee approved by the Superintendent of Schools.
Provided: That if the baby dies at any time prior to its ninth month, the mother shall be eligible for reappointment upon her application, and upon the recommendation of the Superintendent of Schools and approved by the Board of Education.

3. Upon application for reinstatement in the service by any married woman absent on maternity leave, it shall be the duty of the administrative officers to ascertain if a normal birth has occurred and the date of such birth, and to determine the eligibility for reinstatement in accordance with the following procedure:

   a. Said employee shall be eligible for reinstatement in accordance with paragraph 4 of this section if due notice was given and leave of absence taken as otherwise prescribed in this section not less than 175 calendar days prior to the birth of such child.
   b. Said employee shall be ineligible for reinstatement when such failure to comply with the provisions of paragraph 1 of this section computed as aforesaid exceeds 45 calendar days.
   c. For every calendar day less than 175 calendar days and not exceeding 45 calendar days that the proper notice and leave of absence from such employee shall have been received and granted, the date of eligibility for reinstatement shall be postponed 3 calendar days, provided that in applying the penalty of 3 calendar days, the months of July and August shall not be counted.

4. Such employee eligible for reinstatement shall be appointed to the position for which she may be qualified occurring after the expiration or termination of her leave of absence, in accordance with the order of making appointments in section 1, paragraph 1, of Chapter X, provided the application for reinstatement be made within a period of two years dating from the application of leave.[3]

[1] *Minneapolis Public Schools: Charter, Rules, and Regulations.* Minneapolis: Board of Education. 1929. p. 55.
[2] Long Beach, California. *The Administrative Code of the Long Beach City Schools.* Long Beach, Calif.: Board of Education, 1929. p. 15-16.
[3] District of Columbia. *By-Laws, Rules, Regulations, and Selected Statutes.* September, 1926. Washington, D. C.: Board of Education, 1926. p. 39, as amended on November 16, 1927.

Appointment of Local Residents as Teachers

Many school superintendents are confronted with the problem of whether to give local residents preference over outsiders in filling teaching positions. Board members and other laymen often urge the appointment of local teachers for one or more of the following reasons:

1. Local teachers often can be obtained more cheaply than teachers from outside.
2. City loyalty or pride demands that local residents who are unemployed be the first to receive economic assistance through employment.
3. Family, social, and political influence is used to obtain favors for relatives or close friends in the community.

The foregoing statements are reasons, but can hardly be considered justifications, for a policy favoring local teachers as a class. Following are some of the arguments against such a policy:

1. The welfare of the schools, and not the location of the teacher's home, should govern appointments.
2. Local teachers are generally more difficult to dismiss in case they prove unsatisfactory.
3. School systems need the stimulus that comes from teachers with a variety of community backgrounds and experiences.

Present practice in city school systems—Table 7 presents data concerning the policies of city systems in 1930-31 on the question of giving preference to local applicants. Of the entire group of cities reporting, 58 percent give preference to local residents, while 42 percent do not. The practice of favoring local candidates is much more frequent among the larger cities than among the smaller ones; in fact, there is evidently a positive relationship between the size of cities and the proportion

TABLE 7.—POLICIES CONCERNING APPOINTMENT OF LOCAL RESIDENTS AS TEACHERS IN 1930-31

Policy	Cities over 100,000 in population		Cities 30,000 to 100,000 in population		Cities 10,000 to 30,000 in population		Cities 5,000 to 10,000 in population		Cities 2,500 to 5,000 in population		All cities reporting	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7	8	9	10	11	12	13
Preference for local residents	68[1]	80.0	146[2]	77.2	242[4]	60.5	225[6]	54.7	177[8]	43.9	858	57.7
No preference for local residents	17	20.0	43[3]	22.8	158[5]	39.5	186[7]	45.3	226[9]	56.1	630	42.3
Total	85	100.0	189	100.0	400	100.0	411	100.0	403	100.0	1488	100.0

Read table as follows: Of the 85 cities over 100,000 in population reporting as to their policies governing the appointment of local residents as teachers, 68, or 80 percent, give preference to local residents, and 17, or 20 percent, do not give preference to local residents. Similarly read data for other population groups.

This tabulation is based on the replies to questions 3(a) and (b) of the inquiry blank reproduced on page 30.

[1] Of these 68 cities giving preference to local residents, 29 indicated that this preference is given only if the qualifications of local residents are at least equal to those of outside candidates, 14 indicated that local residents must meet the minimum training and experience requirements; and 1 indicated that experience requirements are waived for local residents.

[2] Of these 146 cities giving preference to local residents, 63 indicated that this preference is given only if the qualifications of local residents are at least equal to those of outside candidates, and 33 indicated that local residents must meet the minimum training and experience requirements.

[3] Of these 43 cities giving no preference to local residents, 3 indicated that preference is given to outside candidates, and in 2 cities more experience is required of local than of outside candidates.

[4] Of these 242 cities giving preference to local residents, 96 indicated that this preference is given only if the qualifications of local residents are at least equal to those of outside candidates, and 65 indicated that local residents must meet the minimum training and experience requirements.

[5] Of these 158 cities giving no preference to local residents, 5 have a rule or policy against the employment of local residents, 3 indicated that a preference is given to outside candidates, and in 15 cities more experience is required of local than of outside candidates.

[6] Of these 225 cities giving preference to local residents, 101 indicated that this preference is given only if the qualifications of local residents are at least equal to those of outside candidates, and 60 indicated that local residents must meet the minimum training and experience requirements.

[7] Of these 186 cities giving no preference to local residents, 13 have a rule or policy against the employment of local residents, 7 indicated that a preference is given to outside candidates, and in 35 cities more experience is required of local than of outside candidates.

[8] Of these 177 cities giving preference to local residents, 76 indicated that this preference is given only if the qualifications of local residents are at least equal to those of outside candidates, and 61 indicated that local residents must meet the minimum training and experience requirements.

[9] Of these 226 cities giving no preference to local residents, 27 have a rule or policy against the employment of local residents, 14 indicated that a preference is given to outside candidates, and in 43 cities more experience is required of local than of outside candidates.

following this practice. This proportion varies from 44 percent among cities of 2,500 to 5,000 in population, to 80 percent among cities over 100,000.

Some caution, however, is necessary in interpreting these figures. As explained in the footnotes to Table 7, many of the cities in all population groups which reported a preference for local teachers stated that this preference is given only if the qualifications of local applicants are at least equal to those of outside applicants. In such cases the preference given probably does not conflict with the best interests of the schools.

It is not implied here that administrators should discriminate against home talent as such. Rather, as in the case of married women teachers, school boards will probably do well to make appointments primarily on the basis of fitness for the job. However, if several capable candidates possess approximately equivalent qualifications, there appears to be no sound reason why a local resident should not be selected from their number occasionally. The danger in constant discrimination in favor of local people is that incompetence may creep in, thus gradually devitalizing the school system over a period of years.

Routine Procedures in the Selection of Teachers

Once the board of education has determined the quality of teachers which it wishes to employ, the question arises as to the best methods of obtaining such teachers.

Selection a function of the superintendent—Authorities in school administration are generally agreed that the selection of teachers is a function of the superintendent of schools and his assistants. Board members are not ordinarily trained for this task, and should limit their activity to the approval or rejection of the superintendent's nominations. Even when the board disapproves of a candidate nominated by the superintendent, it should not substitute a candidate of its own. Rather it should ask the superintendent to make another nomination for the position. Candidates should be instructed to send all applications to the superintendent, and not to the board.[1]

Definite search for desirable prospects—A second well-established principle is that the superintendent or his representatives should actively seek desirable candidates. A school system should not depend upon the chance receipt of applications as a means of locating good teachers.[2]

In a questionnaire study of 188 school systems in Texas, Adams found that a majority of the superintendents made an active search for prospective teachers. This practice was especially common in the smaller school systems. The larger systems have many more applications and apparently depend upon these to greater extent.[3]

There are several sources to which the superintendent can turn for suitable candidates. Among these probably the most important are: (1) commercial teachers' agencies, (2) appointment bureaus in normal schools, colleges and universities, (3) other school systems, and (4) appointment offices operated in some states by the state department of education or the state teachers' association. Adams found that in Texas the college appointment bureau was the most popular while the commercialized teachers' agency was the least popular.

Table 8 shows the practice of city school systems in 1930-31 with respect to the use of two of these sources, namely, other school systems and teacher-training institutions. While about 53 percent of all the cities search for prospects in other systems, 77 percent do so in institutions for teacher preparation. The proportion of cities going to each of these sources is much higher among the smaller cities than among the larger cities.

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[1] See the following references:
Reeder, Ward G. *The Fundamentals of Public School Administration*. New York: Macmillan Co., 1930. p. 57-59.
Lewis, E. E. *Personnel Problems of the Teaching Staff*. New York: Century Co., 1925. p. 117-18.
Almack, John C., and Lang, Albert R. *Problems of the Teaching Profession*. Boston: Houghton Mifflin Co., 1925. p. 39-40.
Engelhardt, Fred. *Public School Organization and Administration*. Boston: Ginn and Co., 1931. p. 180-85.

[2] Reeder, Ward G. *op. cit.* p. 63-64.

[3] Adams, Logan S. "Methods of Selecting and Appointing New Teachers in Texas." *Educational Administration and Supervision* 13: 85-9; February, 1927.

Use of formal application blanks—Although the alert superintendent will not wait for applications in making his list of candidates, he will usually find it convenient to obtain information about candidates on an application form. Ordinary letters of application are usually unsatisfactory, particularly in those school systems where large numbers of new teachers are appointed each year. Such letters often omit important items of information, and there is little uniformity in the arrangement of the items included. A formal application blank, on the other hand, is uniform, readily filed, and easily referred to at any time.

The number and percent of city systems reporting the use of application forms in 1930-31 are given in Table 8. This is a widespread practice in city systems of all sizes, and particularly so in the largest cities. Eighty-eight percent of all the systems reporting use some kind of formal application blank.

In a detailed study of teachers' application blanks from 41 large cities in the United States, Nietz found great variation in the number of questions asked on the different forms.[1] The smallest number of items was 24, while the largest number was 117. This study revealed that in general these questions could be classified under the following heads:

1. *Introductory matters*, such as the type of position desired, the time when a position could be accepted, and the salary that would be accepted.
2. *Personal data*, such as name, address, marital status, physical matters (health, weight, height, etc.), date and place of birth, and race and citizenship; also photograph.
3. *Training and educational data*, such as name and location of institutions attended, dates of attendance, year of graduation, credits and degrees received, course taken, professional reading, ability to teach specific subjects, and certificate held.
4. *Experience*, such as nature and kind of school, length, dates, and place of last experience, present salary, and reasons for desire to change positions.
5. *References*, preferably from those who have observed the candidate's teaching.

Similar findings were reported by Wang in his study of 244 application blanks used by city superintendents, county superintendents, and teachers' agencies.[2]

[1] Nietz, John A. "The Current Use of Teachers' Application Blanks." *American School Board Journal* 76: 55-6; March, 1928.
[2] Wang, Charles K. A. "A Study of the Basic Information Utilized in Employing Teachers in the United States." *Education* 48: 355-74; February, 1928.

TABLE 8.—ROUTINE PROCEDURES USED IN SELECTION OF TEACHERS IN 1930-31

Procedures	Cities over 100,000 in population		Cities 30,000 to 100,000 in population		Cities 10,000 to 30,000 in population		Cities 5,000 to 10,000 in population		Cities 2,500 to 5,000 in population		All cities reporting	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7	8	9	10	11	12	13
Definite search for desirable prospects:												
In other school systems	29	34.1	83	43.9	218	54.2	240	57.8	230	57.1	800	53.5
In teacher-training institutions	46	54.1	142	75.1	303	75.4	333	80.2	333	82.6	1157	77.4
Use of formal application blanks	82	96.5	173	91.5	365	90.8	367	88.4	332	82.4	1319	88.3
Collection of information and opinion from persons given as references	74	87.1	160	84.7	330	82.1	355	85.5	337	83.6	1256	84.1
Personal interviews with applicants	76	89.4	184	97.4	388	96.5	392	94.5	383	95.0	1423	95.2
Written examinations	24	28.2	11	5.8	7	1.7	1	0.2	3	0.7	46	3.1
Physical examinations	42	49.4	47	24.9	65	16.2	56	13.5	36	8.9	246	16.5
Observation of classroom work of applicants	38	44.7	101	53.4	253	62.9	252	60.7	235	58.3	879	58.8
Consultation with teachers' agencies and appointment bureaus	3	3.5	3	1.6	16	4.0	13	3.1	11	2.7	46	3.1
Investigation of scholastic records and other qualifications	2	2.4	4	2.1	8	2.0	6	1.4	4	1.0	24	1.6
Other practices[1]	2	2.4	2	1.1	8	2.0	4	1.0	4	1.0	20	1.3
Total number reporting	85	100.0	189	100.0	402	100.0	415	100.0	403	100.0	1494	100.0

Read table as follows: Of the 85 cities over 100,000 in population which reported procedures used in selection of teachers, 29, or 34.1 percent search for desirable prospects in other school systems; 46, or 54.1 percent search in teacher-training institutions for such prospects; 82, or 96.5 percent use formal application blanks, etc. Similarly read other figures for this and other population groups.

This tabulation is based on the replies to question 5 of the inquiry blank reproduced on page 31.

[1] Includes such procedures as: Written applications outlining qualifications; try-outs given in local system; maintenance of waiting list of eligibles; and oral examinations.

Davis analyzed application forms from 148 cities, and found wide differences in the proportion of systems asking various questions.[1] While nearly every blank inquired concerning the health of the candidate, only about one-third of them asked whether the candidate had serious defects of sight or hearing, while fewer than one-half asked whether the applicant had any other bodily defects. About one-half inquired specifically as to church affiliation and religious interest in general. Fewer than 10 percent included a question on the use of tobacco.

All of the 148 blanks asked about the high-school, normal school, and college training of the candidate in general, but relatively few were specific on any one point. Only 18 inquired about the major teaching subject; 16 inquired as to the minor teaching subject; and only 32 asked about graduate study. Only 38 of the blanks inquired about work in education courses, and only 8 of these required a detailed list of such courses. Such lack of uniformity probably means either that many school systems are including a number of useless items on their application forms, or that many others are omitting valuable items. While complete uniformity as to details may not be desirable, some general agreement is needed as to which types of data are essential on an application blank.

Use of reference blanks and letters of recommendation—If a candidate's application is seriously considered, his qualifications should be further investigated. One well-known method of doing this is to obtain the opinions of competent persons who are acquainted with the candidate. Some superintendents prefer to receive personal, informal letters from such persons, while others provide formal reference blanks for recording the desired information. Table 8 shows the number and percent of city school systems in 1930-31 which make a practice of collecting information, in one way or another, from persons given as references. Of the cities reporting in all population groups, 84 percent obtain such information, and the situation differs but little among the several population groups.

In this connection it should be noted that general letters of recommendation of the "To whom it may concern" variety are usually frowned upon by school administrators. Adam's study of 188 cities in Texas shows that 65 percent of the superintendents rejected this type of letter outright. Most of the responses indicated that such recommendations are practically worthless unless the writer is known. On the other hand, 89 percent of these superintendents required personal references of applicants, and then followed up these references.[2]

Davis, analyzing reference blanks from 85 school systems, found a wide variety of types used.[3] Nearly one-half were personal unstandardized forms, while slightly more than half were more or less standardized and formal in nature. A few superintendents employed the form of a personal letter, while an even smaller number used no form of any kind, but sought their information as the circumstances and need suggested. Of the standardized forms in use, more than half asked that a check be made against certain items concerning the qualities of teachers, usually according to a five-point scale. Davis classifies the information requested in the reference blanks under these heads: (1) personality traits, (2) character traits, (3) education, (4) teaching achievements, (5) professional attitudes, (6) social interests, (7) miscellaneous facts.

Davis's criticism of reference blanks in general is that they are too formal and too detailed. He also recommends the use of a three-point scale instead of a five-point scale for the rating of prospective teachers by persons who are not expert in the work of rating.

Wang's analysis of 145 reference blanks yielded similar returns.[4] He found also that the number of items on the blanks used by superintendents was much larger in general than the number on the blanks used by teachers' agencies. The items were classified under the following main heads: (1) personal equipment, (2) social and professional equipment, (3) professional efficiency, (4) endorsement by persons given as references, and (5) miscellaneous items.

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[1] Davis, Calvin O. "What Qualifications Are Demanded of Teachers?" *Nation's Schools* 3: 31-4, January; 62-8, February; 71-6, May; 46-50, June; 1929.
[2] Adams, Logan S., *op. cit.*
[3] Davis, Calvin O., *op. cit.*
[4] Wang, Charles K. A., *op. cit.*

Of the 188 Texas school systems studied by Adams, 71 percent did not use reference forms. Most of these preferred a personal letter from the candidate's former superintendent. However, although only 29 percent were using formal blanks, 44 percent believed them to be valuable.[1]

Dozier studied 1,132 letters of recommendation in the files of the Teachers' Appointment Committee at the University of Texas. These letters, which concerned 179 different candidates, were written by faculty members, superintendents, principals, supervisors, teachers, and laymen. From this investigation the author concludes as follows:[2]

1. The value of recommendations varies with the point of view and training of those who write them.
2. Great care should be exercised in the formulation of rating sheets for collecting data concerning the ability of teachers.
3. Such forms should fit the point of view and training of those who make use of them.
4. The value of recommendations depends in a measure upon the amount of detail recorded.
5. All writers of recommendations place large emphasis upon the social qualities of teachers.

Personal interviews with applicants—The personal interview with candidates for teaching positions is now one of the most widely used procedures in city school systems. Table 8 shows that for all population groups combined, 95 percent of the cities employ this method. The popularity of the personal interview, however, does not mean that it is a simple tool which always yields reliable and satisfactory results. On the contrary, a good interview requires considerable skill and planning on the part of the interviewer. Steiner suggests four general rules for successful interviewing.[3]

1. Keep control of the situation by carefully judging the quality of salesmanship used by the candidate as distinguished from his quality as a teacher.
2. The interview must be entirely free from personal embarrassment on the part of the applicant. . . . Make every applicant so sure of a fair hearing that he can satisfactorily present his best qualities.
3. The person interviewing applicants should be able to visualize or to list the qualities which a successful teacher must have in the position which he is desiring to fill.
4. The interviewer should use a list or an outline of qualities on which he desires to be informed, and a score card of some kind for recording the results of the interview.

Who should interview applicants? In general this should be done by the superintendent or by one or more delegated members of his administrative or supervisory staff. The Texas study referred to above[4] revealed that in the cities replying, no candidate was appointed who had not been interviewed by the superintendent. In about half of these systems board members also interviewed prospective teachers. In about 20 percent of the cases the board committee, the principal, and the supervisor assisted the superintendent in this task.

Observation of classroom work—Probably the best way of determining the teaching ability of an applicant is to observe him teach. Steiner reports that over a period of nine years, of those teachers in his school system who were selected by correspondence alone, 75 percent were not recommended for reappointment. Of those chosen by means of an interview, 24 percent were not reelected; while of the teachers selected after observation of their teaching, none failed to be reappointed on account of unsatisfactory teaching or discipline.[5]

Table 8 shows that although it is not so generally used as the procedures previously discussed, observation of an applicant's classroom work is practiced consistently in more than half of all the cities answering the Research Division's questionnaire in 1930-31. Apparently this method is somewhat more frequent in the smaller cities than in the larger.

Written examinations—The written examination as a device for the selection of teachers is apparently little used by city school systems. The relative unreliability of such measures for predicting success in teaching limits their practical value at present. This, however, is no reason why school systems should discard written examinations entirely. Further experimentation in this promising field is greatly needed, and perhaps it can be carried on nowhere else so well as in the school systems themselves, under the direction of competent specialists.

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[1] Adams, Logan S., *op. cit.*
[2] Dozier, Miriam. "Confidential Recommendations as a Basis for Selecting Teachers." *Journal of Educational Research* 14: 325-35; December, 1926.
[3] Steiner, M. A. "The Technic of Interviewing Teachers." *American School Board Journal* 76: 65-6; June, 1928.
[4] Adams, Logan S., *op. cit.*
[5] Steiner, M. A., *op. cit.*

But until methods of testing are developed much further than at present, considerable caution should be exercised in the interpretation and application of test results.

Table 8 indicates that only 3 percent of all the cities reporting in 1930-31 require prospective teachers to take written examinations. More than half of the cities having such a requirement are over 100,000 in population; consequently the percentage for these larger cities is considerably higher than for all cities combined.

Physical examinations—A physical examination is required of candidates more frequently than is a written examination, but the percentages are small except in the larger cities. Table 8 shows a fairly definite relation between size of population group and the percentage of cities requiring physical examinations. The figures range from 9 percent in the smallest population group to 49 percent in the group of cities over 100,000.

Other practices—Other items of procedure reported by city school systems include the study of reports from teachers' agencies and college appointment bureaus, examination of scholastic records, giving the applicant a tryout in the local system, maintaining a waiting list of eligible candidates, oral examinations, etc. None of these were reported by many cities, but it is probable that some of them were presumed to be included under one or more of the items discussed in the preceding paragraphs.

Wide variation in plans for selecting teachers—Surveys of practice in the selection of teaching personnel show a wide variety in the combinations of technics used by different school systems. Wang summarizes the results of his study as follows:

> The practice concerning the items of information secured in employing teachers by the various school officials throughout the country is very indefinite and lacking in uniformity. From the simplest method of relying upon "evidence of graduation from normal school" to the most complicated process of evaluating a stack of documents including application blanks, reference blanks, scholastic records, statements from former superintendents, teachers' agency reports, and possibly other papers, as well as going through personal conferences and demonstration teachings, there is an almost unmeasurable and indescribable range of variation among the various school officials. Not only do they vary from one another in their methods of securing information on their prospective teachers and in the items of information they try to secure, but also they do not always follow the same procedure among themselves for all applicants coming to their own attention.[1]

It is evident that much additional research will be necessary before the selection of teachers can be placed upon a scientific basis. There is great need for procedures of testing and rating which will predict future teaching success with a high degree of accuracy. Tiegs' conclusions from his analysis of the technics of teacher selection are suggestive on this point:

> It appears, therefore, that the most promising way of progress in the evaluation of teaching service, and the prediction of teaching success, must contemplate procedures which give an increasing emphasis to the minutiae of teacher and pupil activity; that such evaluations as are made should be based on a number of individual samplings, made over a period of time, and in each instance on a definite piece of work; and that the criterion of teaching success should become more and more a combination of definitely defined goals and methods of achieving them toward which teachers may consciously strive, rather than the often indefinite, intangible, and personal concepts of success, on the basis of which we are at present striving to make adequate professional judgments.[2]

[1] Wang, Charles K. A., *op. cit.*
[2] Tiegs, Ernest W. *An Evaluation of Some Techniques of Teacher Selection*. Bloomington, Ill.: Public School Publishing Co., 1928. p. 79.

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Training Requirements for Newly Appointed Teachers

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   Discusses requirements for admission to the teaching profession, and recommends improvement in the kind of training offered before attempting to increase quantitative requirements above the minima now recognized as desirable.

2. BACHMAN, FRANK P. *Training and Certification of High School Teachers.* Nashville, Tennessee: Division of Surveys and Field Studies, George Peabody College for Teachers, 1930. 175 p.

   Reviews status of training and certification of high-school teachers, and discusses obstacles in the way of raising teaching in the secondary schools to a strictly professional level.

3. BUCKINGHAM, B. R. *Supply and Demand in Teacher Training.* Ohio State University Studies, Vol. II, No. 15, Bureau of Educational Research Monographs, No. 4. Columbus, Ohio: Ohio State University, March 15, 1926, 182 p.

   Discusses the problem of supply and demand with respect to the amount and kind of training demanded of teachers by local school systems, and the amount and type of training given by institutions for the preparation of teachers.

4. COOK, KATHERINE M. *State Laws and Regulations Governing Teachers' Certificates.* U. S. Department of the Interior, Bureau of Education, Bulletin, 1927, No. 19. Washington, D. C.: Government Printing Office, 1927. 296 p.

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9. REEDER, WARD G. *The Fundamentals of Public School Administration.* New York: Macmillan Co., 1930. p. 85-89.

   Presents points of view as to the amounts of pre-service training which teachers should have. Discusses also the question of local versus state institutions for the preparation of teachers.

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10. BRUBACHER, JOHN S. "The Judicial Status of Marriage and Maternity as an Obstacle to the Education of Women for Professional Careers in Public School Teaching." *School and Society* 26:428-35; October 1, 1927.

    Reviews judicial decisions and rulings of state superintendents on the validity of marriage and maternity as causes for the dismissal of women from public school teaching positions.

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    Summarizes facts and judgments obtained from 954 school superintendents concerning the status of married women teachers.

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    Discusses restrictions upon the private lives of teachers, including provisions for dismissal of women who marry and the refusal of many school boards to employ married women.

13. GOODIER, FLOYD T. "Another Conclusion Regarding the Married Woman Teacher." *Nation's Schools* 2:51-52; December, 1928.

    Considers the amount of absence and the tendency to continue professional study among single and married women teachers.

14. HOUSMAN, IDA E. "Teachers and Marriage." *School Executives Magazine* 50:502-04, 543; July, 1931.

    A review of fact and opinion on the subject of married women in the schools.

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    Presents arguments for and against the employment of married women as teachers, and reports trend of opinion, court decisions, and school board policies concerning the question.

16. MCGINNIS, W. C. "The Married Woman Teacher." *School Executives Magazine* 50:451-53; June, 1931.

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A concise treatment of problems and procedures in filling vacancies on the teaching staff.

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23. DAVIS, CALVIN O. "What Qualifications Are Demanded of Teachers?" *Nation's Schools* 3: 31-34, January, 1929; 62-68, February, 1929; 71-76, May, 1929; 46-50, June, 1929.

Four articles describing an exhaustive study of practice with respect to application blanks and reference forms in city school systems.

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A study of statements of recommendation on file with the Teachers' Appointment Committee at the University of Texas.

25. ELIASSEN, R. H. "Teacher Selection and Placement." *Review of Educational Research* 1:83-85; April, 1931. Washington, D. C.: American Educational Research Association, National Education Association.

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26. ENGELHARDT, FRED. *Public School Organization and Administration.* Boston: Ginn and Co., 1931. Chapter VIII, "Personnel Management (Qualifications and Appointment)." p. 164-88.

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27. LEWIS, E. E. *Personnel Problems of the Teaching Staff.* New York: Century Co., 1925. Chapter VII, "Problems in Selecting Teachers." p. 115-144.

Discusses the principles and methods to be used in selecting a high-grade teaching personnel.

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Summarizes an analysis of teachers' application blanks used in 45 large cities. Finds wide variation in the number of items included.

29. OERTEL, E. E. "How Shall Teachers and Superintendents Be Selected?" *American School Board Journal* 82:47-48; February, 1931.

A general discussion of principles of selection.

30. REEDER, WARD G. *The Fundamentals of Public School Administration.* New York: Macmillan Co., 1930. Chapter IV, "The Selection of Teachers." p. 55-84.

A good discussion of some of the principles and practices to be followed in selecting, appointing, and placing teachers.

31. SHOUSE, J. B. "Objectionable Practices in the Appointment of Teachers." *Teachers College Journal* 2:147-50; May, 1931.

Discusses four especially objectionable practices in teacher selection: nepotism, patronage, partisanship, and provincialism.

32. STEINER, M. A. "The Technic of Interviewing Teachers." *American School Board Journal* 76:65-66; June, 1928.

Considers the personal interview of real value when conducted by a skilled person. Suggests four principles of interviewing, and gives a form for recording the results of an interview.

33. TIEGS, ERNEST W. *An Evaluation of Some Techniques of Teacher Selection.* Bloomington, Illinois: Public School Publishing Co., 1928. 108 p.

A critical study of methods used to select teachers in large city school systems. Makes suggestions as to the most promising way of progress in the evaluation of teaching and in the prediction of future teaching success.

34. WANG, CHARLES K. A. "A Study of the Basic Information Utilized in Employing Teachers in the United States." *Education* 48:355-74; February, 1928.

Contains data on application blanks, reference blanks and letters, personal interviews, demonstration teaching, reports of teachers' agencies, and various other sources.

Questionnaire Used in Collection of Data

THE NATIONAL EDUCATION ASSOCIATION
OF THE UNITED STATES
1201 SIXTEENTH STREET
WASHINGTON, D. C.

June, 1931

ADMINISTRATIVE PRACTICES AFFECTING CLASSROOM TEACHERS

Professional Qualifications of Teachers

1. *Educational requirements.*—Check below the number of years of training *beyond high school graduation* required for initial appointment as teacher in your city:

Required Number of Years' Training Beyond High School	Elementary School Teachers	Junior High School Teachers	Senior High School Teachers
One year			
Two years			
Three years			
Four years			
Five years			

2. *Experience requirements.*—Check below the number of years of previous teaching experience required for initial appointment as teacher in your city:

Number of Years' Experience Required	Elementary School Teachers	Junior High School Teachers	Senior High School Teachers
No experience required			
One year			
Two years			
More than two years			

Personal Factors Related to Appointment

3. (a) *Local teachers.*—Does your policy give preference to the appointment of local residents as teachers? Yes..... No.....

(b) Please state briefly your practice with regard to the employment of local residents as teachers:.....

.....

.....

4. (a) *Married women as teachers.*—Has your board of education a rule or policy against the appointment of *new* teachers who are married women? Yes..... No.....

(b) Does your school board require women teachers who marry to give up their positions at once? Yes..... No..... At the end of the school year? Yes..... No.....

Questionnaire (Cont.)

Appointment and Contractual Status

5. *Selection of teachers.*—Check any of the following practices which you follow consistently in the selection of teachers:
   (a) Definite search for desirable prospects: (1) In other systems. Yes..... No..... (2) In teacher-training institutions. Yes..... No.....
   (b) Use of formal application blank. Yes..... No.....
   (c) Collection of letters from persons given as references. Yes..... No.....
   (d) Personal interview with applicant. Yes..... No.....
   (e) Written examinations. Yes..... No.....
   (f) Physical examination. Yes..... No.....
   (g) Observation of classroom work of applicant. Yes..... No.....
   (h) Other practices (please describe): .....
   .....

6. *Term of employment.*—What method of employment is followed? (Please indicate below.)

Method of Employment	For newly-elected teachers	For teachers with several years' experience in your system
(a) Annual election.....	.....	.....
(b) Election for term of more than one year (state length of term in years)...	.....	.....
(c) Election for an indefinite period subject to termination at any time.....	.....	.....
(d) Election for permanent service.....	.....	.....
(e) Other plan (please describe).....		

7. *Contracts.*—Are teachers required to sign a contract? Yes..... No.....
8. *Basis for paying teachers' salaries.*—Over how many months does the payment of a teacher's annual salary extend? (a) Nine months..... (b) Ten months..... (c) Eleven months..... (d) Twelve months.....
9. How often are payments of teachers' salaries made? (a) Monthly..... (b) Semi-monthly..... (c) Other plan (please describe).....
   .....
10. *Promotional examinations.*—Does your school system conduct written examinations in connection with promoting teachers within the service? Yes..... No.....
11. *Ratings.*—Are all teachers given a definite rating (e.g., A, B, C, D, E, or Excellent, Good, Fair, Poor) periodically as to quality of service rendered? Yes..... No.....

Salary Schedule Features

12. *Salary schedule.*—Has your city a definite schedule for teachers' salaries? Yes..... No.....
13. If a salary schedule has been adopted, check below the factors which automatically determine a classroom teacher's place on the schedule:
   (a) Number of years of service. Yes..... No.....
   (b) Amount of professional training. Yes..... No.....
   (c) Ratings on efficiency scale. Yes..... No.....
   (d) Position held[1] (e.g., elementary, high school, etc.). Yes..... No.....
   (e) Other factors (please describe).....
   .....

[1] Remember that this blank applies only to classroom teachers.

Questionnaire (Cont.)

14. *Salaries of men teachers.*—Are men teachers paid higher salaries than women of equal training and experience: (a) In elementary schools? Yes..... No..... (b) In junior high schools? Yes..... No..... (c) In senior high schools? Yes..... No.....

15. *Supermaximum salaries.*—Above the regular maximum of your salary schedule do you have a supermaximum to which regular teachers with special qualifications may be promoted? Yes..... No.....

16. If a supermaximum salary is provided, please check below the bases upon which a teacher's promotion from the regular maximum to the supermaximum is dependent:

    (a) Additional training. Yes..... No.....

    (b) Superior rating and performance. Yes..... No.....

    (c) Extra duties. Yes..... No.....

    (d) Length of service. Yes..... No.....

    (e) Written examination. Yes..... No.....

    (f) Other bases (please describe).....

    .....

17. Indicate below the statement which describes the general situation as it affects teachers' salaries in your city in 1931-32:

    (a) The regular salary schedule will be followed as usual, with teachers receiving the customary annual increments.

    .....

    (b) The 1930-31 salary schedule is to be replaced by a new schedule which provides larger salaries for 1931-32.....

    .....

    (c) The regular salary increments will be withheld: i.e., teachers will receive the same salaries in 1931-32 that they are now receiving.....

    (d) Other situation (please describe).....

    .....

Summer School and Travel

18. (a) Is a bonus (apart from the regular salary schedule) granted to teachers for attending summer school Yes..... No.....

    (b) What is the amount of such bonus?.....

    (c) For how many consecutive years may it be granted?.....

19. (a) Do you make any direct financial reward for educative travel? Yes..... No.....

    (b) What is the amount of such reward?.....

Sabbatical Leave

20. Do you grant extended[1] leaves of absence to teachers: (a) For professional improvement? Yes..... No..... (b) For travel? Yes..... No..... (c) For rest? Yes..... No..... (d) For any other purpose?.....

    .....

21. What part of the regular salary is paid to teachers taking leave for professional improvement? (Check below.)

    (a) No salary.....

    (b) Full salary.....

    (c) Half salary.....

    (d) Full salary, less pay of substitute.....

[1] Not including sick leaves. See Question 22.

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FOREWORD

It is highly important to place a well-trained and capable teacher in every classroom. It is equally important to keep such teachers in the schools and to encourage them to improve constantly the quality of their work. After selecting and appointing a competent teaching staff, perhaps the most important function of school administration is to retain successful teachers and to help increase their usefulness to the school and the community. Such a program requires both unusual administrative skill and adequate financial resources.

Every legitimate means for increasing the economic security of good teachers, thus encouraging them to serve the schools longer, will contribute to economy and efficiency in education. Likewise, every useful procedure for the improvement of teachers in service, even though it costs money, will in the long run help to give the public more for its school dollar. These truths should be called to the attention of those who clamor for drastic reductions in educational revenues. The proper administration of public schools should be among the very last services to have financial support withdrawn in times of depression.

This is the second of two new bulletins devoted to problems of teacher personnel administration. While the January bulletin dealt principally with practices in the selection and appointment of teachers, this one discusses practices affecting the retention, promotion, and improvement of teachers. Like its predecessor, this bulletin presents information from the Research Division's latest survey of personnel practices in city school systems. These data are given additional meaning by the accompanying discussion of competent opinion and other research findings in regard to the issues involved. School boards, administrators, teachers, college specialists, and other groups will find this bulletin a valuable companion to the January issue in facilitating their study of teacher personnel problems.

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

Introduction

Part I of this study, published in the January issue of the *Research Bulletin*,[1] dealt with several important aspects of the selection and appointment of classroom teachers. Part II, presented in this issue, follows logically the discussion in Part I. Its contents reflect the principle that once a good teaching staff has been recruited, wise school administration will devote major attention to the problems of retaining, promoting, and improving teachers in service.

The turnover among teachers in the public schools is relatively large.[2] This situation is expensive and unsatisfactory because it interferes with the continuity and effectiveness of teachers' efforts both in the school and in the community. In many school systems there is serious need for policies governing tenure and promotion which will provide economic security for teachers and thus encourage them to serve their communities for longer periods of time.

There is also a widespread need among teachers in service for continuous study of the problems of instruction. Uninformed complacency and habitual opposition to change do not characterize the teaching staff of an efficient school system. Increased responsibilities, a broader philosophy, and improved methods in education require constant adjustment on the part of teachers if they are to meet their problems with increasing success. An important function of educational leadership, therefore, is to stimulate teachers by every legitimate and practical means to maintain a progressive attitude toward their own professional and cultural development.

Plan and procedure of the study—The general background, scope, and procedure of this survey of personnel practices, including both Part I and Part II, were outlined in the January *Research Bulletin*.[3] Hence a somewhat briefer statement will suffice here.

The study was conducted according to a three-fold purpose, as follows:

1. To summarize the best available opinion concerning certain controversial issues and the merits of various administrative practices.
2. To present up-to-date and representative information as to the nature of practices in city school systems, and on some points to indicate the trend during recent years as revealed by a comparison of present practice with corresponding data collected by the Research Division in earlier years.[4]
3. To give a selected and classified list of references for further information and study.

Information concerning administrative practices in city school systems in 1930-31 was obtained by means of a four-page printed questionnaire, which is reproduced at the end of this bulletin. The same questionnaire contained all of the items for both Part I and Part II of the study. This form was sent in June, 1931, to all superintendents of schools in the 2,880 cities of 2,500 or more in population according to the federal census of 1920.[5] Of these cities, 1,489 returned replies which were usable wholly or in part. The following summary shows how the number of responses compares with the total number of cities in each of the five population groups according to the census of 1930:

Population group	Number of cities according to 1930 census	Cities replying	
		Number	Percent
Over 100,000.....	93	85	91.4
30,000 to 100,000..	224	188	83.9
10,000 to 30,000..	663	402	60.6
5,000 to 10,000..	886	415	46.8
2,500 to 5,000..	1467	399	27.2
Total.....	3333	1489	44.7

The percentages of usable returns from the larger cities were very high. Moreover, although the percentages of smaller cities responding were considerably lower, there is no reason to suppose that those reporting in any population group are not fairly typical of all cities in that group.

Topics discussed in this bulletin—As indicated above, the information obtained concern-

[1] National Education Association, Research Division. "Administrative Practices Affecting Classroom Teachers—Part I: The Selection and Appointment of Teachers." *Research Bulletin* 10: 1-32; January, 1932. Washington, D. C.: the Association.

[2] Evenden, E. S. "The Supply and Demand for Senior High School Teachers" and "The Supply of and Demand for Elementary Teachers." *School Life* 17: 92-93; 112-14; January and February, 1932.

[3] National Education Association, Research Division. *op. cit.*, p. 3-4.

[4] For complete reports of these earlier studies, see the following references: National Education Association, Salary Committee (E. S. Evenden, chairman). *Report: Teachers' Salaries and Salary Trends in 1923*. Washington, D. C.: the Association, July, 1923. Chapter III, "Special Provisions Affecting Teachers' Salaries in the United States." p. 48-57.

National Education Association, Research Division. "Practices Affecting Teacher Personnel." *Research Bulletin* 6: 205-56; September, 1928. Washington, D. C.: the Association.

[5] At the time the questionnaires were mailed out, the names of superintendents of schools were not available for communities whose populations had increased from less than 2,500 in 1920 to 2,500 or more in 1930.

ing practices affecting primarily the selection and appointment of teachers was presented in the January issue of the *Research Bulletin*.

The present bulletin summarizes the data collected as to practices affecting the retention, promotion, and improvement of teachers. Following are the main topics included:

1. The term of employment for teachers.
2. Teachers' salaries and salary scheduling.[1]
3. Sick leave and related problems.
4. Extended leaves of absence for professional or cultural improvement.
5. Teacher rating as a means of improvement.

There are, of course, many other ways by which teachers may be helped to achieve greater efficiency and satisfaction in their work. In fact, nearly every factor in the school system may have some influence upon the effectiveness of instruction. Good working conditions, a modern and dynamic curriculum, a helpful program of classroom supervision, cooperative relations between school and community,—all may play an important part in facilitating the improvement of teaching. Such topics, however, are outside the scope of this bulletin.

The Term of Employment for Teachers

One very important factor affecting the efficiency of teachers is the assurance that their positions are secure so long as they continue to give satisfactory service. Efficiency in the classroom depends considerably upon the economic security of teachers, and their economic security in turn rests in no small measure upon the promise of continuous employment.

Although the probability of an efficient teacher being dismissed is not great under ordinary circumstances, such teachers unfortunately are discharged occasionally for political and personal reasons. The harm done to the effectiveness of the schools by such dismissals or by the threat of such dismissals is often much greater than the number of cases involved might seem to indicate. Teachers should therefore have a reasonable amount of protection against dismissal during efficiency.

Types of laws and regulations governing duration of teachers' contracts[2]—The duration of teachers' contracts in local school systems is usually governed in one or more of the following ways: (1) by state legislation, (2) by municipal ordinances, (3) by regulations or policies of local school boards, and (4) by the provisions of the contracts themselves. All of these methods are subject to review and interpretation by the courts. Moreover, to be effective continuously, any such regulations must be backed by public respect for the importance of effective teaching in the classroom.

There are four principal types of legislation or regulation governing the term of teachers' employment. The most common of these provides that teachers shall be elected annually, and that the school board shall not employ any teacher for more than one year at a time. No reason is needed for the dismissal of a teacher at the end of any year under this type of regulation.

A second type of regulation permits the school board to make contracts with teachers for specified periods of more than one year. The courts, however, generally hold that contracts of this sort must not extend over an unreasonably long period. The laws applying to all school districts in Texas and Ohio, and those applying to limited groups of districts in Mississippi, Nebraska, and North Dakota are clear-cut examples of this type of regulation. In Texas, contracts may be made for periods of three years or five years, according to the size of the school district. In Ohio they may be made for three years or four years, according to the type of district.

A third kind of regulation provides for a continuing contract between the school board and the teachers. This plan requires that the board notify a teacher by a specified date if his services are not desired for the following year. If the teacher is not notified by the date set, his contract continues automatically for at least another year. The continuing-contract plan, as defined here, is distinguished from permanent tenure arrangements chiefly by the fact that it permits a teacher to be dismissed at the end of any year, irrespective of the reason, pro-

[1] This section is not to be confused with the Research Division's biennial survey of the salaries paid teachers and other school employees in city school systems of the United States. The latest of these is summarized in "Salaries in City School Systems, 1930-31." *Research Bulletin* 9: 161-288; May, 1931. Washington, D. C.: National Education Association.

[2] See these references:

National Education Association, Department of Classroom Teachers. "The Economic Welfare of Teachers." *Sixth Yearbook*. Washington, D. C.: the Association, 1931. Chapter III, "Employment During Efficiency," p. 39-46.

Foster, Richard R. "Continuous Employment for the Teacher." *Journal of the National Education Association* 20: 343-44; December, 1931.

vided he has been notified by the specified date. Laws in Pennsylvania and Nevada are examples of this type of regulation.

The fourth type of plan establishes a probationary period of one or more years during which the school board may discharge a teacher at the end of any year for any reason or for no reason. If the board wishes to reemploy the teacher at the close of the probationary period, it must place him on permanent tenure. The board cannot dismiss the teacher at any time thereafter except upon proved charges of incompetency, insubordination, immorality, or other specified causes. In case of dismissal after permanent appointment, the teacher is entitled to a hearing, and under some laws may appeal to higher authority such as the courts or the chief state school official. The tenure laws in California, Indiana, Maryland, New Jersey, New York, and the District of Columbia illustrate this type of protection.

Present practice in city school systems—Table 1 presents a distribution of the city school systems reporting in 1930-31, according to the plans they follow with respect to the term of employment for teachers. In this table no attempt is made to distinguish between cities with regard to the source of the regulations. In some cities the practice is required by state law, while in others it is determined by municipal ordinances, or by regulations of the local school board.

Evidently the annual election plan is still the most prevalent in all except the group of largest cities. Its relative frequency varies from 39 percent in cities over 100,000 in population to 67 percent in cities of 2,500 to 5,000. The plan of election for permanent service after a probationary period, on the other hand, becomes more common as the size of city increases. The proportion of cities using it ranges from 21 percent in the smallest population group to 56 percent in the group over 100,000. One or the other of these two practices is found in nearly 88 percent of all the cities reporting.

The continuing contract plan, or election for an indefinite period subject to termination without cause at the end of any year, is followed in only about 12 percent of the cities, while fewer than 1 percent elect teachers for specified periods of more than one year.

General principles for establishment of contractual regulations—In any attempt to protect teachers against unfair dismissal, it is essential also to guard pupils against incompetent or undesirable teachers. A good law or regulation should aim to obtain and retain only those teachers of first-rate ability and character. The National Education Association, through its Committee on Tenure, has suggested twelve guiding principles for the adop-

TABLE 1.—POLICIES GOVERNING THE TERM OF EMPLOYMENT FOR TEACHERS IN 1930-31

Policy	Cities over 100,000 in population		Cities 30,000 to 100,000 in population		Cities 10,000 to 30,000 in population		Cities 5,000 to 10,000 in population		Cities 2,500 to 5,000 in population		All cities reporting	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7	8	9	10	11	12	13
Annual election or contract for one year only	33	39.3	106	57.3	231	59.5	242	60.0	255	66.6	867	60.1
Election for permanent service after a probationary period	47	55.9	64	34.6	105	27.1	100	24.8	80	20.9	396	27.5
Election for an indefinite period subject to termination at the end of any year	4	4.8	14	7.6	51	13.1	59	14.7	47	12.3	175[1]	12.1
Election for a specified term of more than one year	.....	.....	1	.5	1	.3	2	.5	1	.2	5[2]	.3
Total	84	100.0	185	100.0	388	100.0	403	100.0	383	100.0	1443	100.0

Read table as follows: Of the 84 cities over 100,000 in population which reported policy governing the term of employment of teachers, 33, or 39.3 percent, stated that teachers are elected or contracted for one year only; 47, or 55.9 percent, are elected for permanent service after a probationary period, etc. Similarly read figures for other population groups.

This tabulation is based on the replies to question 6 of the inquiry blank reproduced on pages 72-75.

[1] In 61 of these 175 cities newly appointed teachers are elected annually.

[2] In four of these five cities newly appointed teachers are elected annually.

tion of laws and regulations affecting the term of employment for teachers.[1] These principles are designed to guarantee the retention of teachers during efficiency, and also to provide for each community a high grade of teaching service:

1. Tenure laws should be devised and administered in the interest of better instruction for children.
2. Tenure laws should be accompanied by proper legal regulations governing training, certification, remuneration, and retirement allowances.
3. Tenure laws should be devised and administered as a stimulus to better preparation and more efficient service on the part of teachers.
4. Indefinite tenure should be granted only upon evidence of satisfactory preliminary training, successful experience, and professional growth.
5. Indefinite tenure should be provided after successful experience during a probationary period of adequate length, usually two or three years.
6. The right of dismissal should be in the hands of the appointing board.
7. Laws establishing indefinite tenure should provide for the easy dismissal of unsatisfactory or incompetent teachers for clearly demonstrable causes, such as misconduct, incompetence, evident unfitness for teaching, persistent violation or refusal to obey laws, insubordination, neglect of duty, or malfeasance.
8. The proposed dismissal of a teacher on account of incompetence or neglect of duty should be preceded by a warning and specific statement in writing of defects.
9. In cases of proposed dismissal, teachers should be granted right of hearing.
10. Teachers who do not desire to continue in their positions should give reasonable notice in writing of their intention.
11. Suitable provision should be made for teachers already in service in putting tenure laws into operation.
12. Indefinite tenure should be accorded to all classes of certificated school employees on status of teacher, at least.

Use of formal contracts—Formal contracts between school boards and teachers are of value, not only because they specify the amount of salary and the term of employment, but also because they emphasize certain laws and regulations, and help to impress upon teachers and their employers the binding character of their agreement. Although such contracts are not absolutely essential, they are used in a large majority of school systems. Table 2 shows that of all city systems below 100,000 in population which reported in 1930-31, over 90 percent require their teachers to sign contracts. Of the cities over 100,000 in population, however, only about 73 percent have such a requirement. A few cities in which permanent tenure regulations are in effect require teachers to sign contracts only during the probationary period.

[1] National Education Association, Committee of One Hundred on Tenure Problems. *Report.* Washington, D. C.: the Association, July, 1930. 3 p.

TABLE 2.—USE OF WRITTEN CONTRACTS FOR TEACHERS IN 1930-31

Teacher required to sign contract	Cities over 100,000 in population		Cities 30,000 to 100,000 in population		Cities 10,000 to 30,000 in population		Cities 5,000 to 10,000 in population		Cities 2,500 to 5,000 in population		All cities reporting	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7	8	9	10	11	12	13
Yes	61	73.5	174[1]	92.1	378[2]	94.0	389[3]	93.7	377[4]	93.5	1379	92.4
No	22	26.5	15	7.9	24	6.0	26	6.3	26	6.5	113	7.6
Total	83	100.0	189	100.0	402	100.0	415	100.0	403	100.0	1492	100.0

Read table as follows: Of the 83 cities over 100,000 in population which reported concerning the question of written contracts, 61, or 73.5 percent, require their teachers to sign contracts, while 22, or 26.5 percent, have no such requirement. Similarly read figures for other population groups.

This tabulation is based on the replies to question 7 of the inquiry blank reproduced on pages 72-75.

[1] Four of these reported that contracts are used during the probationary period or until the teacher is under permanent tenure.

[2] Five of these reported that contracts are used during the first years of service or until the teacher is under permanent tenure.

[3] Two of these reported that contracts are used until the teacher is employed for permanent service, and 3 reported that the teacher must submit a letter of acceptance.

[4] Two of these reported that contracts are used until the teacher is under permanent tenure, and one reported that they are used in the case of non-resident teachers.

Salary Scheduling as a Principle

Salary schedule defined—The term "salary schedule" is used here in accordance with the definition given in a previous issue of the *Research Bulletin:*

> By a salary schedule is meant a plan for the payment of school employees formally adopted by the Board of Education or School Committee, which to a large degree automatically determines the beginning salary, the amount and number of yearly increases, and the maximum salary received by various groups of teachers, principals, and other employees with specified qualifications.[1]

Such a schedule reflects the school board's policy with reference to the financial compensation of those responsible for the education of the community's children. The drafting of such a plan is not simple. It involves a consideration of many factors, sound judgment in balancing these factors, and an intimate knowledge both of local conditions and of policies and practices throughout the nation.[2]

Advantages of a salary schedule—It is widely believed that a definite salary schedule is a real advantage in the efficient conduct of the schools. Individual bargaining has often led to resentment within the teaching force, favoritism in the payment of teachers with personal or political influence, and endless disagreements about salaries. The adoption of a salary schedule tends to eliminate the element of personal pressure and permits the development of a broad and well-balanced policy.[3]

The danger of over-standardization doubtless lurks in salary scheduling as it does in every other plan for managing a large enterprise. Such dangers must be frankly admitted and faced. A machine-like plan of compensation which permits no adjustments for dealing with exceptional individuals or situations is a perversion of the salary-scheduling principle. Growth and not stagnation is the ideal condition of a teaching staff, and the salary schedule, together with many other administrative devices, should contribute to this desirable end. A reasonable degree of flexibility is therefore essential in the development and administration of a successful salary schedule.

Recognition of the scheduling principle in city school systems—Table 3 shows that of the 1,479 school systems reporting on this point in 1930-31, 79 percent have definite salary schedules for their teachers. This practice is much more common among the larger cities than among the smaller ones. All of the cities from 30,000 to 100,000 in population reported that they have salary schedules, while only 65 percent of those from 2,500 to 5,000 have such schedules.

[1] National Education Association, Research Division. "The Scheduling of Teachers' Salaries." *Research Bulletin* 5: 159 May, 1927. Washington, D. C.: the Association.

[2] *Ibid.*, p. 159.

[3] For a good brief statement on the advantages of salary schedules see the introductory chapter in: Elsbree, Willard S. *Teachers' Salaries.* New York: Bureau of Publications, Teachers College, Columbia University, 1931.

TABLE 3.—USE OF DEFINITE SALARY SCHEDULES FOR TEACHERS IN 1930-31

Definite salary schedule for teachers:	Cities over 100,000 in population		Cities 30,000 to 100,000 in population		Cities 10,000 to 30,000 in population		Cities 5,000 to 10,000 in population		Cities 2,500 to 5,000 in population		All cities reporting	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7	8	9	10	11	12	13
Yes	84	98.8	180	100.0	330	82.5	305	74.2	264	65.5	1163	78.6
No	1	1.2	.....	.....	70	17.5	106	25.8	139	34.5	316	21.4
Total	85	100.0	180	100.0	400	100.0	411	100.0	403	100.0	1479	100.0

Read table as follows: Of the 85 cities over 100,000 in population which reported, 84, or 98.8 percent, have adopted a definite salary schedule for teachers, while 1, or 1.2 percent, has no definite schedule. Similarly read figures for other population groups.

This tabulation is based on the replies to question 12 of the inquiry blank reproduced on pages 72-75.

Factors Determining the Teacher's Place on the Regular Salary Schedule

Factors used to determine the place of a given teacher on the regular salary schedule include: (1) number of years of service, (2) amount of professional training, (3) ratings on an efficiency scale, (4) position held, and (5) sex. Some of these factors are widely accepted as desirable. Others are used in only a few school systems. The following discussion deals with each in the order named, and concludes with a summary of practice as to the combinations of certain factors in the schedules of city school systems.

Years of service—Agreement is practically universal that successful experience adds to the skill and value of the teacher and should be recognized by increments in the salary schedule. The most desirable number and frequency of such increments, however, have not yet been agreed upon. The number of years during which increases are provided in most schedules ranges between five and fifteen. Some authorities, however, assert that such increases should be continued during a period of from twenty to thirty years. They contend that if the maximum salary is reached too early in the teacher's career, professional stagnation is likely to occur during the later years.[1] In many cases, of course, factors other than length of service may affect the total number of years during which salary increments may be received.

The universal use of experience as a factor in determining the place of the teacher on the schedule is shown in Table 4.

Amount of professional training—Administrators and teachers are coming to realize that experience alone cannot be depended upon to produce high-grade teaching service. To make the most of his experience, a teacher must keep abreast of progress in educational philosophy, psychology, and methods. He should also have a thorough mastery of the materials he is attempting to teach. Thus it is that the amount of professional training, although less frequently used than years of service, is now rather common as a factor in determining teachers' salaries.

Table 4 shows that in 75 percent of the 1,077 salary-schedule cities reporting, the amount of a teacher's professional training is one of the factors which automatically determine his place on the schedule. The proportion is approximately the same for each of the five population groups.

Efficiency rating as a salary factor[2]—If highly valid and reliable measures of a teacher's ability and performance were available, many of the problems of personnel administration, including salary scheduling, would be much nearer solution. The limitations of amounts of experience and training as measures of teach-

[1] National Education Association, Department of Classroom Teachers. "The Economic Welfare of Teachers." *Sixth Yearbook*. Washington, D. C.: the Association, 1931. p. 34-35.

[2] The rating of teachers as a supervisory device for the improvement of instruction is discussed in a subsequent section on pages 64-66.

TABLE 4.—CERTAIN FACTORS AUTOMATICALLY DETERMINING A TEACHER'S PLACE ON THE SALARY SCHEDULE IN 1930-31

Factors[1]	Cities over 100,000 in population		Cities 30,000 to 100,000 in population		Cities 10,000 to 30,000 in population		Cities 5,000 to 10,000 in population		Cities 2,500 to 5,000 in population		All cities reporting	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7	8	9	10	11	12	13
Number of years of service	84	100.0	171	100.0	306	100.0	277	100.0	239	100.0	1077	100.0
Amount of professional training	61	72.6	134	78.4	229	74.8	211	76.2	175	73.2	810	75.2
Rating on efficiency scale	5	6.0	25	14.6	32	10.5	29	10.5	23	9.6	114	10.6
Position held	66	78.6	116	67.8	227	74.2	234	84.5	197	82.4	840	78.0
Total	84	100.0	171	100.0	306	100.0	277	100.0	239	100.0	1077	100.0

Read table as follows: Of the 84 cities over 100,000 in population which reported, 84, or 100 percent, indicated that the number of years of service is a factor in determining a teacher's place on the schedule; 61, or 72.6 percent, indicated that the amount of professional training is a determining factor, etc. Similarly read figures for other population groups.

This tabulation is based on the replies to question 13 of the inquiry blank reproduced on pages 72-75.

[1] For figures on sex as a factor in salary schedules, see Table 5. In this table no attempt is made to give the frequency of various combinations of the factors used in determining a teacher's place on the schedule. For combinations of the factors listed above, see Table 6.

ing ability have long been recognized. Authorities are generally agreed, however, that although the rating of teachers may be a useful supervisory device, it has not yet been sufficiently refined to permit any but rather rough distinctions between different grades of teaching ability. For this reason the use of rating scales in the administration of the regular salary schedule cannot be undertaken with great confidence in the outcome.[1] Teachers are particularly resentful of anything akin to the capricious in a matter so important to them as their salaries. A suspicion that they are not getting a fair deal will soon undermine the effectiveness of any staff of teachers. Consequently, although it cannot be asserted definitely that the use of efficiency rating as a salary factor is unwise under all circumstances, the dangers involved in this practice should be recognized and guarded against in any plan of salary payment.

Table 4 indicates that only about 11 percent of the cities having salary schedules use efficiency ratings as a factor in determining a teacher's place on the schedule. There is apparently little relationship between size of cities and their practice on this point, but it is perhaps significant that of the 84 cities over 100,000 in population, only 6 percent use ratings as a salary determinant.

During the three-year period from 1927-28 to 1930-31, however, there apparently has been a slight increase in the use of efficiency ratings as a factor in determining teachers' salaries. Of 1,412 cities reporting on this point in 1928, including several hundred which did not have definite salary schedules, only 67 used ratings as a salary determinant. In 1931, of 1,077 cities having salary schedules, 114 reported that the salaries of their teachers are determined in part by efficiency ratings. This small increase was characteristic of all five population groups.[2]

A number of cities reported that they grant no salary increments to teachers rated as doing entirely unsatisfactory work. This, of course, is quite different from granting increments of varying amounts according to different degrees of merit as measured by ratings. However, if a teacher's work is wholly unsatisfactory, he probably ought to be dismissed from the school system.

Position as a salary factor—Should teachers in elementary schools be paid lower salaries than high-school teachers, experience, training and other qualifications being equal? Those who answer this question in the affirmative assert that the work of the high-school teacher makes greater demands on time and energy than that of the elementary-school teacher, that it calls for more unusual personal qualities, and that the limited supply of qualified high-school teachers, especially in certain fields, makes a higher schedule for this group essential if high standards are to be maintained. Formerly, it was also argued or implied that high-school teaching was intrinsically more important than elementary-school instruction. This latter view is no longer seriously advanced.

Those who favor salary provisions which apply uniformly to high-school and elementary-school teachers argue that elementary teaching demands as high a degree of intelligence, ability, and character as high-school work, and that salary discriminations between the two groups are therefore unfair and unwise. They argue also that a differential in pay between elementary and secondary levels is a relic of the days when teachers' pay was fixed primarily in

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[1] See these references:

American Educational Research Association. "Teacher Personnel." *Review of Educational Research* 1: 99-107; April, 1931. Washington, D. C.: the Association. Chapter VII, "Teacher Rating" (by Russell L. C. Butsch).

Elsbree, Willard S. *Teachers' Salaries*. New York: Bureau of Publications, Teachers College, Columbia University, 1931. p. 84.

Almack, John C., and Lang, Albert R. *Problems of the Teaching Profession*. Boston: Houghton Mifflin Co., 1925. p. 189-92.

McGaughy, James R., director. *Teachers' Salaries in New York City*. Final Report of Citizens' Committee on Teachers' Salaries. New York: Bureau of Publications, Teachers College, Columbia University, 1927. p. 105-07.

[2] Wherever possible in this bulletin, comparisons are drawn between the results of the 1930–31 survey and those of two earlier studies made by the Research Division in 1922–23 and 1927–28. On many questions of practice this was not possible, either because the items were not included in the questionnaires used in the earlier studies, or because they were not worded uniformly enough to yield comparable results.

The comparisons are not limited to exactly the same cities in the different years. It is assumed that the sampling of cities for each year was reasonably adequate and that, therefore, the comparisons between the different years are valid.

The figures given here for the 1927–28 survey are slightly different from those presented in the original report of that survey. (See "Practices Affecting Teacher Personnel." *Research Bulletin* 6: 205–56; September, 1928. Washington, D. C.: National Education Association.) These differences are due primarily to the fact that in the original report the cities were classified according to population as given in the 1920 federal census. For the purpose of comparison in the present bulletin, however, the data for 1927–28 were recalculated with the cities grouped according to the 1930 census. This procedure seems justified on the ground that in 1928 the populations of most cities were probably much nearer to the 1930 census figures than to the 1920 census figures.

On the other hand, the occasional figures presented here for the 1922–23 survey are the same as those originally reported. (See *Teachers' Salaries and Salary Trends in 1923*. Report of the Salary Committee, National Education Association, Washington, D. C.: the Association, July, 1923. Chapter III, "Special Provisions Affecting Teachers' Salaries in the United States." p. 48-57.) In this case it appears likely that the 1920 census figures, which were used in the classification of cities in 1923, were more applicable than the populations reported in the 1930 census.

terms of the grade taught, and that such discrimination reflects an outworn educational philosophy.

Table 4 reveals that most city school systems have not yet adopted the principle of the "single salary schedule." Of the salary-schedule cities reporting on this question, 78 percent make salary distinctions among classroom teachers according to the type of school in which they teach. In three of the five population groups, the position held is used by more cities than is the amount of professional training as a factor automatically determining a teacher's place on the schedule.

Sex as a factor in fixing salaries—Probably no other factor affecting teachers' salaries has received as much attention as the question of whether men and women of equal merit, doing similar work, shall be paid the same salary.[1]

The arguments in favor of higher salaries for men are usually listed somewhat as follows:

1. If salaries of women teachers are raised to the level of those paid men teachers, great increases in taxes will be necessary.
2. On the other hand, if salaries of men teachers are reduced to equal those of women, many capable men teachers will leave school work for other occupations.
3. Our public schools are already suffering from overfeminization. Growing children should have contacts with both men and women teachers.
4. The supply of men teachers is limited; higher salaries must therefore be paid to secure their services.

The arguments on the contrary side have been stated thus:

1. Equal pay for equal work is a growing practice and is fundamentally sound.
2. Salaries should be based on service rendered and not on extraneous questions, such as sex.
3. The assumption that men are the only ones who carry the burden of dependents is fallacious.
4. Women are rapidly attaining equality with men in other occupations and in other aspects of life.

Objective data against which these conflicting claims might be checked are limited. Some of the previous objective studies of this problem are reviewed below. Others will be found by consulting the bibliography.

Percent of men teachers—The percent of men teachers in elementary and secondary schools rose between 1920 and 1928 from 14.1 percent to 16.6 percent. This increase, however, has only partly replaced the general decline in the proportion of men since 1880 when no less than 42.8 percent of the nation's public school teachers were men. Conditions vary greatly among the states. In West Virginia 29 percent of all teachers are men; in Iowa only 7.9 percent.[2]

Dependents—In 1925 Lewis estimated "that about 90 percent of the women teaching in high schools and grade schools are unmarried and that about 65 to 70 percent of the men are married." "Of course," he adds, "the fact that women are not married does not mean that they do not have other dependents."[3] A number of local studies[4] of teachers' dependents have been reported but there is no recent comprehensive survey of the problem.

Relative demands upon men and women teachers—Koch[5] collected and classified the difficulties experienced by a small group of men and women teachers in their work. His findings showed no significant difference between the men and women with respect to the number and kinds of problems reported. His findings, he says, support the views of Briggs that "the qualities desired of a teacher are much more characteristic of an individual than of a sex."[6] The psychological literature which deals with sex differences also supports the conclusion that no striking dissimilarities exist.[7]

Table 5 contains a distribution of salary-schedule cities according to whether or not men teachers are paid higher salaries than women of equal training and experience. These data are limited to teachers in junior and senior high schools, as most cities employ few if any men teachers in their elementary schools.

Of the 962 cities reporting on the situation in junior high schools, 42 percent pay higher salaries to men teachers than to women teachers in such schools. Of the 1,098 cities reporting as to the policy in senior high schools, 55 percent pay higher salaries to men teachers. The discrimination in favor of men is more frequent in cities under 30,000 in population than in those over 30,000. Of 71 cities over 100,000

[1] A comparison of the statements by the Schoolmen's Club of Kansas City and the Women Teachers' Committee of Cincinnati brings out clearly the various problems involved. See "Equal Pay for Equal Service." *American Educational Digest* 45: 113–14; November, 1925. Also, "Men's and Women's Salaries in Cincinnati Schools." *School and Society* 24: 39; July 10, 1926.

[2] Phillips, Frank M. *Statistics of State School Systems, 1927-1928*. U. S. Dept. of the Interior, Office of Education, Bulletin, 1930, No. 5, Washington, D. C.: Government Printing Office, 1930. p. 28, Table 11.

[3] Lewis, E. E. *Personnel Problems of the Teaching Staff*. New York: Century Co., 1925. p. 272.

[4] For example, the recent salary surveys in New York, San Francisco, Yonkers, Pittsburgh, and Minneapolis.

[5] Koch, Harlan C. "Is There a Difference Between the Problems of Men and Women Teachers?" *Educational Research Bulletin* 5: 163-66; April 14, 1926.

[6] Briggs, Thomas H. *The Junior High School*. Boston: Houghton Mifflin Co., 1920. p. 14.

[7] Woolley, Helen Thompson. "A Review of the Recent Literature on the Psychology of Sex." *Psychological Bulletin* 7: 335-42; October 15, 1910.

Woolley, Helen Thompson. "The Psychology of Sex." *Psychological Bulletin* 11: 353-79; October 15, 1914.

in population only 13 percent pay higher salaries to men teachers in junior high schools; and of 84 cities in this population group only 15 percent pay higher salaries to men teachers in senior high schools.

Combinations of factors used in determining salaries—Table 6 contains information concerning the various combinations of factors, excluding sex, used by city school systems in determining the place of teachers on their salary

TABLE 5.—DIFFERENTIATION BETWEEN SALARIES OF MEN AND WOMEN TEACHERS IN 1930-31

Men paid higher salaries than women of equal training and experience:	Cities over 100,000 in population		Cities 30,000 to 100,000 in population		Cities 10,000 to 30,000 in population		Cities 5,000 to 10,000 in population		Cities 2,500 to 5,000 in population		All cities reporting	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7	8	9	10	11	12	13
Junior high-school teachers:												
Yes	9	12.7	59	36.4	133	49.0	113	46.1	91	42.7	405	42.0
No	62	87.3	103	63.6	138	51.0	132	53.9	122	57.3	557	58.0
Total reporting	71	100.0	162	100.0	271	100.0	245	100.0	213	100.0	962	100.0
Senior high-school teachers:												
Yes	13	15.5	73	42.2	187	60.5	179	63.5	150	60.0	602	54.8
No	71	84.5	100	57.8	122	39.5	103	36.5	100	40.0	496	45.2
Total reporting	84	100.0	173	100.0	309	100.0	282	100.0	250	100.0	1098	100.0

Read table as follows: Of the 71 cities over 100,000 in population reporting on this question for junior high-school teachers, 9, or 12.7 percent, indicated that men teachers are paid higher salaries than women of equal training and experience, while 62, or 87.3 percent, indicated that men are not paid higher salaries. Similarly read figures for senior high-school teachers and for other population groups.

This tabulation is based on the replies to question 14 of the inquiry blank reproduced on pages 72-75.

TABLE 6.—COMBINATIONS OF FACTORS DETERMINING A TEACHER'S PLACE ON THE SALARY SCHEDULE IN 1930-31

Combination of factors	Cities over 100,000 in population		Cities 30,000 to 100,000 in population		Cities 10,000 to 30,000 in population		Cities 5,000 to 10,000 in population		Cities 2,500 to 5,000 in population		All cities reporting	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7	8	9	10	11	12	13
Number of years of service only	.....	.....	1	.6	3	1.0	5	1.8	9	3.8	18	1.7
Number of years of service and amount of professional training	18	21.4	39	22.8	55	18.0	31	11.2	25	10.5	168	15.6
Number of years of service, amount of professional training, and rating on efficiency scale	.....	.....	14	8.2	20	6.5	6	2.2	5	2.1	45	4.2
Number of years of service, amount of professional training, rating on efficiency scale, and position held	2	2.4	8	4.7	9	2.9	19	6.9	18	7.5	56	5.2
Number of years of service, amount of professional training, and position held	41	48.8	73	42.7	145	47.4	155	55.9	127	53.1	541	50.2
Number of years of service, rating on efficiency scale, and position held	3	3.6	2	1.1	3	1.0	4	1.4	.....	.....	12	1.1
Number of years of service and rating on efficiency scale	.....	.....	1	.6	.....	.....	.....	.....	.....	.....	1	.1
Number of years of service and position held	20	23.8	33	19.3	71	23.2	57	20.6	55	23.0	236	21.9
Total	84	100.0	171	100.0	306	100.0	277	100.0	239	100.0	1077	100.0

Read table as follows: Of the 84 cities over 100,000 in population which reported, 18, or 21.4 percent, indicated that a teacher's place on the salary schedule is determined by the number of years of service and the amount of professional training; 2, or 2.4 percent, indicated that a teacher's place is determined by the number of years of service, amount of professional training, rating on efficiency scale, and position held, etc. Similarly read figures for other population groups.

This tabulation is based on the replies to question 13 of the inquiry blank reproduced on pages 72-75.

schedules.[1] Of the 1,077 salary-schedule cities reporting, about one-half place teachers on the schedule according to a combination of three factors: years of service, amount of professional training, and the teaching position held. Only two other combinations are used with marked frequency. Years of service and position held determine a teacher's salary in 22 percent of the cities, while years of service and amount of professional training determine it in 16 percent of the cities. These three combinations are the most frequent in all population groups, and in general the percentages of cities using them do not vary greatly from one population group to another. Of the entire 1,077 cities, 2 percent use only one factor to determine salaries, 38 percent use two factors, 55 percent use three factors, and only 5 percent use all four of the factors included in Table 6.

Supermaximum Salaries

The desirability of a flexible administration of salary schedules has already been mentioned. One of the most widely used and approved plans for doing this is the supermaximum salary.

Definition—The supermaximum salary has been defined as follows:

> The supermaximum, as its name implies, provides one or more additional salary steps beyond the normal maximum established for the majority of the teaching staff, for the elect few who are fortunate enough to qualify for it. The number of teachers who can secure this extra compensation is necessarily limited, either informally in practice or formally in the schedule itself, since otherwise the supermaximum would soon become the regular maximum for the entire personnel. Eligibility is usually restricted to those with the greatest amount of training who have already reached the normal maximum for their respective positions and who have displayed superior teaching ability.[2]

The same authority cautions against allowing the existence of a special supermaximum to depress the level of the regular maximum to which all teachers of satisfactory ability may attain. He writes:

> If there is to be a supermaximum, it should be added on as a postscript after the regular maximum has been definitely and finally determined. In fact, the question of whether to have a supermaximum should not even be raised until the normal maximum has been fixed, because schedule-maker, superintendent, and school board cannot help being influenced in establishing the regular maximum if they know that a supermaximum is to be included in the schedule. A high supermaximum should never be regarded as a justifiable substitute for an adequate maximum for the entire staff.[3]

Present practice in city school systems—Table 7 shows that of 1,153 salary-schedule cities reporting in 1930-31, 44 percent have supermaximum salaries to which regular teachers with special qualifications may be promoted. There appears to be no definite relationship between the size of cities and the proportion using this device in their schedules.

The various bases upon which a teacher's advancement from the regular maximum to the supermaximum depends in these cities are also shown in Table 7. Considerable diversity in practice is evident here. Among the entire 509 cities reporting supermaximum salaries, additional training is used most frequently as a basis, while written examinations are employed least frequently. Extra duties and superior rating and performance are used as bases in somewhat more than half of the school systems, while length of service as a factor is considerably less common. While additional training is required more frequently in cities over 30,000 than in those of smaller populations, just the reverse is true with respect to superior rating and performance, extra duties, and length of service.

Trend of practice in recent years—A comparison of data concerning the use of supermaximum salaries in 1930-31 and in 1927-28 indicates some increase in the popularity of this device during the three-year period. Of 1,454 cities reporting on the question in 1928, including those with regular salary schedules and those without such schedules, 436 had supermaximum provisions for teachers. In 1931, of the 1,153 salary-schedule cities reporting, 509 stated that they grant supermaximum salaries. This increase was characteristic of all population groups except that over 100,000.[4]

Illustrative schedules—A few schedules illustrating the actual operation of various bases for promotion to supermaximum salaries are presented below. They have been chosen at random and their inclusion does not imply a particular recommendation of any one of them.

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[1] The factor of sex is not included in these combinations because its use varies somewhat according to type of school. For example, some cities pay men teachers higher salaries than women in senior high schools, but not in junior high schools.

[2] Elsbree, Willard S. *Teachers' Salaries*. New York: Bureau of Publications, Teachers College, Columbia University, 1931. p. 67.

[3] *Ibid.*, p. 106-7.

[4] See footnote on page 41 for explanation of the methods used in comparing data for different years.

Trenton, N. J.—Illustrating supermaxima dependent on professional training.—The regular maximum for elementary school teachers is $2400. Special maxima are fixed as follows: For those possessing ½ year of professional preparation beyond the standard normal school training, $2500; for those possessing 1 year beyond the standard, $2600; for those possessing 1½ years beyond the standard, $2700; for those possessing 2 years beyond the standard, $2800. A similar plan is followed for other members of the teaching and supervisory staff.[1]

Oakland, California—Illustrating supermaxima dependent on training plus special performance—The normal maximum for elementary school teachers is $2460. A special maximum of $120 annually is paid to those meeting the following requirements:

1. At least one year's experience at the maximum rating provided in one of the regular schedules.
2. Twenty units of credit, not heretofore counted on salary schedule, earned while in the employ of the Oakland Public Schools, these units to be in the general field of education and in the teacher's special field—not more than one-half of these units to be in the special field—and a research study on some approved problem in education affecting the Oakland Public Schools which shall be adjudged the equivalent of a thesis for the Master's Degree.
3. Recommendation of supervisory staff, including principals and superintendents.
4. Application for first special maximum must be submitted to the Superintendent and adjudged by the Professional Study Board.

A second special maximum of $180 annually is available to those who meet the following requirements:

1. Two years or more experience under the first special maximum.
2. A creative contribution to education made while in the service of the Oakland Public Schools and upon a problem directly affecting the Oakland Public Schools, such contribution to consist of the equivalent of a dissertation for the Doctor's Degree. The merit of this contribution to be judged by the Professional Study Board.[2]

3 and 4. Similar to items 3 and 4 under the first special maximum.[3]

Washington, D. C.—Illustrating supermaxima dependent on success in teaching, plus written examinations, plus other factors—A number of elements enter into this plan, the most heavily weighted single item being the recorded ratings of the teacher's success. The normal maximum for elementary school teachers is $2200; the supermaximum is $2600. Corresponding figures for senior high-school teachers are $2800 and $3200. Junior high-school teachers

[1] Trenton Public Schools. *Salary Schedule* adopted, June 6, 1930. Mimeographed. 3 p.
[2] This board consists of the deans of two neighboring colleges of education.
[3] Oakland Public Schools. *Selection of Teachers and Schedule of Salaries*. Administrative Regulation Series No. 2, 1927. p. 11

TABLE 7.—SUPERMAXIMUM SALARIES FOR TEACHERS IN 1930-31

Policy	Cities over 100,000 in population		Cities 30,000 to 100,000 in population		Cities 10,000 to 30,000 in population		Cities 5,000 to 10,000 in population		Cities 2,500 to 5,000 in population		All cities reporting	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7	8	9	10	11	12	13
Supermaximum salary available to regular teachers with special qualifications:												
Yes	34	40.5	75	42.4	165	50.5	134	44.5	101	38.3	509	44.1
No	50	59.5	102	57.6	162	49.5	167	55.5	163	61.7	644	55.9
Total reporting	84	100.0	177	100.0	327	100.0	301	100.0	264	100.0	1153	100.0
Bases upon which a teacher's advancement from the regular maximum to the supermaximum is dependent:[1]												
Additional training	30	88.2	56	75.0	101	61.2	88	65.7	63	62.4	338	66.4
Superior rating and performance	16	47.1	34	45.3	90	54.5	85	63.4	65	64.4	290	57.0
Extra duties	10	29.4	32	43.0	95	57.6	80	59.7	65	64.4	282	55.4
Length of service	8	23.5	19	25.3	50	30.3	45	34.0	29	28.7	151	30.0
Written examinations	1	2.9	1	1.3	1	1.0	.....	.....	.....	.....	3	6
Total number reporting supermaximum salaries	34	100.0	75	100.0	165	100.0	134	100.0	101	100.0	509	100.0

Read table as follows: Of the 84 cities over 100,000 in population replying, 34, or 40.5 percent, reported supermaximum salaries to which regular teachers with special qualifications may be promoted, while 50, or 59.5 percent, do not give supermaximum salaries. Of the 34 cities in this population group reporting supermaximum salaries, 30, or 88.2 percent, indicated that additional training is a factor upon which promotion to the supermaximum depends; 16, or 47.1 percent, stated that superior rating and performance are factors, etc. Similarly read figures for other population groups.

This tabulation is based on replies to questions 15 and 16 of the inquiry blank reproduced on pages 72-75.

[1] In this table no attempt is made to give the frequencies of various combinations of these factors used in promoting teachers to supermaximum levels. The frequencies given for each factor are independent of those for all other factors.

are divided into two groups. The normal maxima for the lower and higher salaried groups are $2400 and $2800, respectively; the supermaxima, $2800 and $3200. In order to be considered for advancement to the supermaximum, a score of at least 700 credits must be made. Credits may be earned as shown in Table 8.

Direct Financial Rewards for Additional Training or Travel

The recognition of academic and professional training in the regular salary schedule and in plans for granting supermaximum salaries has been discussed in preceding sections.[1] This section summarizes practice and opinion with respect to granting special salary bonuses or other direct financial rewards to teachers pursuing courses in summer schools or otherwise improving their professional equipment. The relative merits of summer schools, travel, extension courses, or other forms of professional development are not discussed here.[2]

How meet the cost of professional competency?—Professional competency must be paid for at some point. Teachers of sound scholarship and full professional preparation, with broad experience and contacts, cannot be obtained for the same cost as teachers with little training and contacts no wider than those of their local communities. As the demand for increasingly skilled service grows, the financial rewards offered must be stepped up somewhat proportionately. Good schools require good teachers; good teachers possess aptitude, training, knowledge, and cultural background; and the services of persons possessing such qualities cannot be purchased cheaply.

However, whether the cost of maintaining a corps of able and well-trained teachers should be met through a system of petty and piecemeal financial rewards is another question. Such methods probably were temporarily necessary after the war. The lowered purchasing power of salaries had forced many of the best teachers from the profession. They had been replaced in many instances by relatively unprepared recruits. When a school system finds itself with a large percentage of such teachers, the piecemeal method of lifting the professional preparation of its teaching staff to an acceptable minimum may be desirable as a temporary expedient.

Ultimately the aim should be to employ none but well-prepared teachers and to maintain standards of performance in the classroom which can be met only by those who keep abreast of the best school theory and practice. The keystone to such a situation must be a salary schedule which makes it economically practicable to expect first-rate people to equip themselves with the pre-service and in-service training essential for classroom work on a high level.

That this view is becoming rather well accepted is indicated by the following quotations from a symposium on the question: Should teachers receive a bonus for professional study?[3] These quotations are representative of the

[1] See pages 40, 43, and 44.
[2] For discussion of this point see: National Education Association, Research Division. "Practices Affecting Teacher Personnel." *Research Bulletin* 6: 228-29; September, 1928. Washington, D. C.: the Association.
[3] "Symposium on Professional Study: Should Teachers Receive a Bonus for It?" *Journal of Education* 111: 91-92; January 27; 119-20; February 3; 147; February 10, 1930.

TABLE 8.—SYSTEM OF CREDIT ALLOWANCES FOR PROMOTION TO SUPERMAXIMUM SALARY LEVELS IN WASHINGTON, D. C.[1]

Basis of credits	Basis of allowance	Maximum credits allowed
Recorded success in teaching	Five official ratings	325
Familiarity with modern educational theory and practice	One-hour written examination	200
Educational preparation and additional training	Transcripts	140
Constructive educational work	Well-organized educational plans and investigations	100
Professional interest and growth	Publications on educational subjects, affiliation with professional organizations, travel	35
Civic interest	Membership and participation in civic groups, lectures, and other outside contacts	50
Assigned work other than teaching	Assignments by superior officers	50
Personal equipment	Any of the above items and matters related thereto as determined through an oral examination	100
Total		1,000

[1] Ballou, F. W. *Superintendents' Circular No. 40.* Public Schools of the District of Columbia, Washington, D. C. February 17, 1931.

views of superintendents, teachers, and college experts in personnel administration:

A plan whereby teachers are encouraged to take professional improvement courses by having their salary increased, if properly safeguarded and administered, . . . is in the main to be commended. Such a procedure, however, must be regarded more as an expediency than a fundamental procedure.[1]

One of the chief reasons for the prevalence of the bonus-for-summer-school-attendance is the effort of superintendents to use this system as a lever in wresting additional salary for teachers from a niggardly board of education. Given an adequate salary schedule, resort to a device of this sort is no longer necessary. And to propose that the school board pay a bonus to the teacher for doing what is normally expected of an alert professional worker is to deny the adequacy of the salary schedule proper. If it is desirable or necessary for teachers to attend summer school once every five years in order to keep up-to-date professionally, then this factor should be a consideration in establishing the main structure of the salary schedule, and should not be superimposed as a bonus.[2]

If we could approach our ideals in education, we would be paying our teachers salary enough so they could afford to study at first-class institutions all the time, and we would be hiring teachers with a craving for knowledge and a passion for service. Then we wouldn't have to talk about bonuses. . . . But we are a far call from any such condition.[3]

These and other comments on the bonus plan suggest that, if used at all, it should be regarded as a temporary expedient rather than as a continuous and basic element in the program for professional improvement.

Present practice in city school systems—Table 9 shows that only 19 percent of the school systems reporting in 1930-31 grant direct financial rewards to teachers for attending summer schools, and that in no population group does this proportion exceed 22 percent. Only about 7 percent of the cities reporting grant such rewards for educative travel, and in no population group does this proportion exceed 10 percent. These direct rewards were reported as being independent of the regular salary schedule.

Trend of practice in recent years[4]—Table 10 compares the situation among city school systems in 1930-31 with that in 1927-28 regarding the granting of direct rewards or bonuses for attendance at summer school. Some increase in the proportion of cities using such plans is evident in all population groups. The larger increases, however, occurred in the three smaller population groups. For all cities reporting, the proportion granting bonuses for summer school attendance increased from about 12 percent to 19 percent.

[1] Harvey S. Gruver, Superintendent of Schools, Lynn, Massachusetts.
[2] Willard S. Elsbree, Associate Professor of Education, Teachers College, Columbia University.
[3] Mary Elizabeth O'Connor, Natick, Massachusetts.
[4] See footnote on page 41 for explanation of the assumptions and methods involved in the comparison of data for different years.

TABLE 9.—GRANTING SPECIAL BONUSES FOR SUMMER-SCHOOL ATTENDANCE AND EDUCATIVE TRAVEL IN 1930-31

Policy	Cities over 100,000 in population		Cities 30,000 to 100,000 in population		Cities 10,000 to 30,000 in population		Cities 5,000 to 10,000 in population		Cities 2,500 to 5,000 in population		All cities reporting	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7	8	9	10	11	12	13
Bonus granted teachers for attending summer school:												
Yes	9	10.7	27[1]	14.6	86	21.6	91	22.4	67[2]	17.0	280	19.1
No	75	89.3	158	85.4	312	78.4	316	77.6	327	83.0	1188	80.9
Total reporting	84	100.0	185	100.0	398	100.0	407	100.0	394	100.0	1468	100.0
Direct financial reward for educative travel:												
Yes	4	5.1	11	7.0	28	8.3	32	10.0	15	4.9	90	7.5
No	75	94.9	146	93.0	308	91.7	288	90.0	293	95.1	1110	92.5
Total reporting	79	100.0	157	100.0	336	100.0	320	100.0	308	100.0	1200	100.0

Read table as follows: Of the 84 cities over 100,000 in population reporting, 9, or 10.7 percent, grant bonuses for summer-school attendance; while 75, or 89.3 percent, do not grant such bonuses. Similarly read figures for other population groups.
This tabulation is based on replies to questions 18 and 19 of the inquiry blank reproduced on pages 72-75.
[1] One of these reported that bonus is given only for those at the maximum, and another reported that bonus is given only for graduate work.
[2] One of these reported that bonus is given only for those at the maximum.

Period and Frequency of Salary Payments

Number of months over which salary payments extend—The bearing of this question upon the efficiency of teachers is probably small. Some believe that since teachers have to live for twelve months in the year, their salary payments should be distributed over that period. It is particularly important that teachers have money during the summer vacation for professional improvement and suitable recreation. On the other hand, if the total annual salary is adequate, teachers should be able to plan their expenditures so that enough remains to meet their vacation needs, regardless of whether the total income is received during ten, twelve, or some other number of months.

Table 11 shows the practice of city school systems on this point in 1930-31. Payment during ten months is evidently the most common plan among all the cities combined, with the nine-months period a close second. The former is more popular among the larger cities, while the latter is found most frequently among cities of 2,500 to 5,000 in population. These two periods for payment probably coincide with the length of the school terms in many school systems. Only 14 percent of the 1,487 systems reporting extend salary payments over twelve months. This proportion varies from 9 percent in the group of smallest cities, to 20 percent in the two largest population groups.

Frequency of payments—Table 11 also shows the frequency of salary payments in these cities. About 76 percent of all those reporting pay their teachers once a month, and this proportion is practically the same for each population group. Nearly all of the others pay twice a month, while only 14 systems pay weekly.

Sources of Information on Salaries and Salary Scheduling

The Research Division receives many inquiries concerning teachers' salary scheduling and related problems. Every year hundreds of city and rural school systems are given help in meeting their salary problems. The questions which follow are among those most commonly received. The best sources of information now available concerning these questions are given below. If this information is not adequate, a letter may be addressed to the Research Division, definitely indicating the aid desired. The Division keeps constantly in touch with sources of material bearing on teachers' salaries and other aspects of teachers' economic security.

1. *Where can I secure general comparative statistics on expenditures for education and for other purposes?* Such figures are secured from many different sources and consequently very recent comparisons are usually impossible. The latest comparative data now available are for 1928. These data are reported in the *Research Bulletin* for September, 1930.[1]

2. *Where can I secure facts showing the position of expenditures for salaries among other school expenditures?* These facts are compiled by states every two years by the U. S. Office of Education. The latest compilation now in print is for the school year

[1] National Education Association, Research Division. "Investing in Public Education." *Research Bulletin* 8: 166-220; September, 1930. Washington, D. C.; the Association.

TABLE 10.—COMPARISON OF POLICIES AS TO GRANTING SPECIAL BONUSES FOR SUMMER SCHOOL ATTENDANCE IN 1927-28 AND 1930-31

Special bonuses granted for summer-school attendance	Cities over 100,000 in population		Cities 30,000 to 100,000 in population		Cities 10,000 to 30,000 in population		Cities 5,000 to 10,000 in population		Cities 2,500 to 5,000 in population		All cities reporting	
	1928	1931	1928	1931	1928	1931	1928	1931	1928	1931	1928	1931
1	2	3	4	5	6	7	8	9	10	11	12	13
Number of cities	7	9	17	27	62	86	54	91	43	67	183	280
Percent of cities	8.5	10.7	9.8	14.6	15.5	21.6	13.2	22.4	10.7	17.0	12.5	19.1
Total number reporting	82	84	173	185	400	398	410	407	401	394	1466	1468

Read table as follows: Of the 82 cities over 100,000 in population reporting their policies as to the granting of bonuses for summer-school attendance in 1927-28, 7, or 8.5 percent, granted such bonuses, while in 1930-31, 9, or 10.7 percent of the 84 cities reporting, granted such bonuses. Similarly read figures for other population groups.

1927-28.[1] A compilation for 1929-30 will be published soon. The distribution of school expenditures in individual cities has been studied in alternate years by the U. S. Office of Education and the National Education Association. The most recent reports on per capita costs and percentage distributions of the school budget are for the years 1929-30 and 1930-31.[2] More detailed statistics are available for 1927-28,[3] and similar figures for 1929-30 will soon be available.

3. *Where can I secure statements of the general theory of salary scheduling?* Such statements can be found in almost any good textbook on school finance, teacher personnel management, or school administration in general. The latest publication given over entirely to the question of teachers' salaries is that of Elsbree.[4] A previous issue of the *Research Bulletin* deals with the same general field but with less attention to the detailed technics of salary schedule construction.[5]

4. *Where can I secure data on the cost of living with respect to teachers' salaries?* There are at present no reliable nation-wide figures on cost of living for teachers alone. Several agencies, however, compile national estimates of the cost of living. The publications of the

[1] U. S. Department of the Interior, Office of Education. *Statistics of State School Systems, 1927-28.* Bulletin, 1930, No. 5. Washington, D. C.: Government Printing Office, 1930. 58 p. 10c.

[2] Comstock, L. M. *Per Capita Costs in City Schools, 1929-30.* Pamphlet No. 19, U. S. Department of the Interior, Office of Education. Washington, D. C.: Government Printing Office, 1931. 13 p. 5c.

National Education Association, Department of Superintendence and Research Division. *City School Expenditures, 1930-31.* Educational Research Service Circular No. 1, 1932. Washington, D. C.: the Association 36 p.

[3] U. S. Department of the Interior, Office of Education. *Statistics of City School Systems, 1927-28.* Bulletin, 1929, No. 34. Washington, D. C.: Government Printing Office, 1929. 193 p. 30c.

[4] Elsbree, Willard S. *Teachers' Salaries.* New York: Bureau of Publications, Teachers College, Columbia University, 1931. 286 p.

[5] National Education Association, Research Division. "The Scheduling of Teachers' Salaries." *Research Bulletin* 5: 130-92; May, 1927. Washington, D. C.: the Association.

TABLE 11.—POLICIES AS TO PERIOD AND FREQUENCY OF TEACHERS' SALARY PAYMENTS IN 1930-31

Policy	Cities over 100,000 in population		Cities 30,000 to 100,000 in population		Cities 10,000 to 30,000 in population		Cities 5,000 to 10,000 in population		Cities 2,500 to 5,000 in population		All cities reporting	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7	8	9	10	11	12	13
Number of months over which teachers' salary payments extend:												
Eight months	.....	.....	1	.5	.....	.....	.....	.....	1	.2	2	.1
Nine months	8[1]	9.5	37[2]	19.7	127[4]	31.7	177[6]	43.0	216[9]	53.8	565	38.0
Ten months	58	69.1	111	59.1	202[5]	50.4	185[7]	44.9	147[10]	36.6	703	47.3
Eleven months	1	1.2	1	.5	2	.5	.....	.....	1	.2	5	.3
Twelve months	17	20.2	38	20.2	70	17.4	50	12.1	37	9.2	212	14.3
Total	84	100.0	188	100.0	401	100.0	412	100.0	402	100.0	1487	100.0
Frequency of payments:												
Monthly	65[3]	78.3	136	72.7	303	77.1	304[8]	73.6	306[11]	77.1	1114	75.6
Semi-monthly	15	18.1	45	24.1	88	22.4	106	25.7	90	22.7	344	23.3
Weekly	3	3.6	5	2.7	2	.5	3	.7	1	.2	14	1.0
Other practice	.....	.....	1	.5	.....	.....	.....	.....	.....	.....	1	.1
Total	83	100.0	187	100.0	393	100.0	413	100.0	397	100.0	1473	100.0

Read table as follows: Of the 84 cities over 100,000 in population reporting period over which payments of teacher extend, 8, or 9.5 percent, indicated that these payments extend over 9 months; 58, or 69.1 percent, indicated over 10 months, etc. Of the 83 cities in this population group reporting frequency of payments, 65, or 78.3 percent, indicated that monthly payments are made; 15, or 18.1 percent, indicated that semi-monthly payments are made, etc. Similarly read figures for other population groups.

This tabulation is based on replies to questions 8 and 9 of the inquiry blank reproduced on pages 72-75.

[1] Four of these reported salaries paid for 9½ months.

[2] One of these reported that 20% of the teachers are on a weekly payment plan.

[3] Seven of these reported 9½ months, and two reported 9¼ months.

[4] One of these reported 9¾ months; nine of these reported 9½ months; five reported optional 9 or 12 months; two reported also 10 months plan used and one reported the use of 12 months plan in a few cases.

[5] One of these reported optional for 10 or 12 months; another reported that 12 months plan was used in special cases.

[6] Four of these reported 9¾ months; five reported 9½ months; two reported also some teachers on 10 months plan; two reported also some teachers on 12 months plan; and two reported also some teachers on 10 and on 12 months plan.

[7] Seven reported optional for 10 or 12 months, one reported optional for 10 or 11 months, and one reported also some teachers on 12 months plan.

[8] One reported some teachers on semi-monthly plan.

[9] Five of these reported 9½ months, 7 reported some teachers paid on 12 months plan, one reported optional for 9, 10, or 12 months, and one reported also some teachers on 10 months plan.

[10] Five of these reported that some teachers are also paid on a 12 months plan.

[11] Four also pay semi-monthly in some cases.

U. S. Bureau of Labor Statistics and of the National Industrial Conference Board should be consulted. Facts on the effect of changes in the cost of living on the purchasing power of teachers' salaries are conveniently summarized in a recent publication of the National Education Association.[1]

5. *How can I compare salaries paid teachers with those paid other occupational groups?* The U. S. Bureau of Labor Statistics frequently publishes figures showing the prevailing wage rates, especially for union labor in the various cities and districts of the nation. The publications of this Bureau are available in most city libraries. Comparisons on a national basis between the salaries of teachers and of certain other occupational groups for 1928 are available in a recent publication of the National Education Association.[2]

6. *Where can I get data on the salaries actually paid city school employees of various types?* Data concerning salaries paid to 368,-418 employees in 1,632 city school systems for 1930-31 are available in the *Research Bulletin* for May, 1931.[3]

7. *Where can I secure the latest information on salaries paid rural school teachers?* This information is collected by the U. S. Office of Education and has been published in its Bulletin No. 6, 1929.[4] A summary of a number of comparative studies of salaries paid rural and urban teachers is available in the *Research Bulletin* for September, 1931.[5]

8. *How can I compare in detail the salaries paid teachers and other school employees in a group of cities of comparable size?* The biennial salary survey conducted by the Research Division is reported in two ways. The general facts and averages are reported in one of the *Research Bulletins*.[6] For those who wish more detailed information, special salary tabulations are prepared and reproduced by a planographing process. These tabulations are sold at a cost sufficient to pay for reproduction and mailing. The cost of collecting the data in the first place is borne by the Association. Those who wish to make highly detailed comparisons should order the *Special Salary Tabulations*, mentioning the size of the city which is to be included in the comparison and the types of employees to be covered. A folder describing the *Special Salary Tabulations* will be sent upon request.[7]

9. *How can I get in touch with the salary surveys that have been made in various city school systems?* A large number of such surveys have been published in recent years and are available for purchase or distribution. For a list of such surveys consult the *Sixth Yearbook* of the Department of Classroom Teachers, pages 182-86.[8]

10. *Where can I get recent information concerning the effect of the business depression on teachers' salaries?* This topic has been covered in a recent publication of the National Education Association.[9]

11. *Where can I get criteria for judging state salary legislation?* The Research Division publishes an annual summary of school legislation including laws enacted affecting the salaries of teachers.[10] This legislation as it affects the welfare of teachers has been summarized in a recent magazine article.[11] Standards for judging state salary laws are proposed and discussed in the March and May, 1930, *Research Bulletins*.[12]

12. *Where can I get helpful publicity ma-*

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[1] National Education Association, Research Division. *What's Ahead for Teachers' Salaries.* Washington, D. C.: the Association, 1930. 16 p.

[2] Ibid.

[3] National Education Association, Research Division. "Salaries in City School Systems, 1930-31." *Research Bulletin* 9: 162-228; May, 1931. Washington, D. C.: the Association.

[4] U. S. Department of the Interior, Office of Education. *Salaries and Salary Trends of Teachers in Rural Schools.* Bulletin, 1929, No. 6. Washington, D. C.: Government Printing Office, 1929. 54 p. 10c.

[5] National Education Association, Research Division. "The Outlook for Rural Education." *Research Bulletin* 9: 230-302; September, 1931. Washington, D. C.: the Association.

[6] National Education Association, Research Division. "Salaries in City School Systems, 1930-31." *Research Bulletin* 9: 162-228; May, 1931. Washington, D. C.: the Association.

[7] National Education Association, Research Division. *Special Salary Tabulations, 1930-31—(I-A—V-A)—Salaries Paid Teachers, Principals, and Certain Other School Employees. Special Salary Tabulations, 1930-31—(I-B—V-B)—Salaries Paid Administrative and Supervisory Officers.* Washington, D. C.: the Association, 1931. $5.00 a set.

[8] National Education Association, Department of Classroom Teachers. "The Economic Welfare of Teachers." *Sixth Yearbook.* Washington, D. C.: the Association, 1931. 244 p.

[9] National Education Association, Research Division. *Childhood and the Depression: A Look Ahead.* Washington, D. C.: the Association, 1931. 42 p.

[10] National Education Association, Research Division. *State School Legislation, 1931.* Studies in State Educational Administration, No. 10. Washington, D. C.: the Association, February, 1932. 20 p.

[11] Carr, William G. "Recent Laws That Affect the Teacher Directly." *Nation's Schools* 5: 53-55; May, 1930.

[12] National Education Association, Research Division. "A Self-survey Plan for State School Systems. Part I: Checklists: Part II: Handbook." *Research Bulletin* 8: 54-88; March, 1930; 90-164; May, 1930. Washington, D. C.: the Association.

terial for use in salary campaigns? A recent publication of the National Education Association showing the relationship between education and business has been widely used for this purpose.[1] A series of specific suggestions for observing American Education Week, many of which can be used in an all-year program of school publicity, are available in a pamphlet prepared by the Division of Publications, National Education Association.[2] Most recent textbooks on school administration and related problems contain good chapters on methods for interpreting the needs of the schools to the public.

Sick Leave and Related Problems

It has been estimated that more than 250,000,000 working days are lost annually in the United States on account of sickness.[3] Surveys of health conditions show that the average wage earner in the United States loses between six and seven working days a year because of sickness.[4] Personal illness, however, is not the only compelling reason for absence from duty. Personal responsibility may take precedence over professional duty when there is grave sickness or death in the home, in the case of legal procedures, in response to certain religious obligations, and in meeting other personal claims not to be ignored.

It will be agreed that teachers have an obligation to reduce to the barest minimum their absence from work for personal reasons. A teacher's absence from school usually means a loss to the school system. The pupils must be taught by a substitute whose service often does not equal that of the missing teacher. In spite of every resolution, however, teachers will at times be unable to respond to the morning bell.

Two important questions arise in connection with the absence of teachers for unavoidable personal reasons: (1) What provision shall be made to care for the classes of the absent teacher? and (2) What proportion, if any, of the absent teacher's salary shall be paid by the school board, and how long shall such payment continue?

The only defensible answer to the first question is that the classes of absent teachers should be met by the best substitutes that can be found. The provision of competent substitutes should not be left to chance, but should be as thoughtfully administered as the selection of regular teachers. The conditions of employment of substitutes should be so planned as to lead to maximum efficiency in this part of the teaching service.

One answer to the second question might be that the teacher has contracted to deliver his professional service in full, and that any failure to do so should result in a proportionate reduction in pay. On the other hand, the more progressive school officials and citizens are generally agreed that the welfare of both the teacher and his pupils is enhanced if a limited amount of absence, for imperative personal reasons, is permitted without entire loss of pay. The teacher's efficiency is strengthened by the sense of personal security that comes with protection of his income against loss due to unavoidable emergencies. A reasonable leave-of-absence policy, properly safeguarded, places the school board in the position of a fair employer who is responsive to the human element in the teacher's relation to his profession. The improved morale derived from knowing that a few days of necessary absence will not be penalized by salary deduction, and the gains in teachers' health derived by their remaining away from the classroom while ill have important values for the school system.

Suggested principles governing leave-of-absence policies—There is probably no adequate statement of the principles upon which leave-of-absence policies should be based. In most cases such policies probably have developed in a more or less haphazard fashion under the influence of local custom and tradition. The following tentative list of principles is suggested

[1] National Education Association, Research Division. *The Schools and Business.* Washington, D. C.: the Association. 1930 24 p.

[2] National Education Association, and the Department of Superintendence. *Things To Do.* (A Handbook for the Schools and the Public on the Observance of American Education Week, November 9-15, 1931.) Washington, D. C.: the Association, and the Department of Superintendence, July 1, 1931. 52 p.

[3] Riegel, Robert, and Loman, H. J. *Insurance Principles and Practices.* New York: Prentice-Hall, Inc., 1929. p. 240.

[4] Dublin, Louis I., and Lotka, Alfred J. *The Money Value of a Man.* New York: Ronald Press Co., 1930. p. 110.

by common sense and by an examination of provisions for administering teacher absence in a large number of cities:

1. The education of pupils during the absence of regular teachers should be safeguarded by providing trained, capable, and well-paid substitute teachers.

2. The conditions under which leave of absence with pay may be granted should be clearly and definitely stated.

3. The remuneration of absent teachers and the number of days during which such remuneration may be received should be determined by a consideration of (1) lengths of absences among teachers for various reasons in the local school system, (2) the financial ability of the system, and (3) current practice in other communities.

4. Some financial protection should be provided against long attacks of illness, when the teacher's economic security is most endangered by loss of income.

5. The plan for allowing leaves of absence should be safeguarded against abuse.

6. Constructive measures should be taken to keep at a minimum the amount of absence due to ill health (1) by testing physical fitness when teachers are selected and periodically thereafter, and (2) by maintaining healthful working conditions in the schools.

The next few pages discuss each of these suggested principles in turn, and present pertinent data as to policies and practices in city school systems.

Safeguarding pupil welfare during absence of teachers—A few cities have set up detailed rules for the administration of substitute service,[1] but much remains to be done in many school systems before substitute teachers are employed with the care which the importance of their service warrants. There are two general classes of substitutes: (1) temporary, emergency, or day-to-day substitutes, and (2) permanent or annual substitutes. The first class includes teachers who are paid at a flat rate per day and those who are paid in some direct proportion to the salary of the absent teacher. In some cases the method of determining a

[1] For example, see: Oakland, California. *Principal Rules and Regulations, 1928.* p. 91-93; Minneapolis, Minnesota. *Rules and Regulations 1929.* p. 47-48; and Cleveland, Ohio. *Administrative Code, 1925.* p. 59.

TABLE 12.—POLICIES GOVERNING EMPLOYMENT OF SUBSTITUTE TEACHERS IN 1930-31

Policy	Cities over 100,000 in population		Cities 30,000 to 100,000 in population		Cities 10,000 to 30,000 in population		Cities 5,000 to 10,000 in population		Cities 2,500 to 5,000 in population		All cities reporting	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7	8	9	10	11	12	13
All substitutes are on temporary basis, receiving a flat rate per day	80[1]	94.1	165[2]	88.2	354[3]	88.9	384[3]	93.7	339[4]	85.0	1322	89.4
All substitutes are on temporary basis, receiving pay in some direct proportion to the absent teacher's salary	.....	.....	3	1.6	15	3.8	22	5.4	51[5]	12.8	91	6.1
All substitutes are on permanent, full-time basis, receiving regular monthly salary	1	1.2	3	1.6	7	1.8	3	.7	6	1.5	20	1.4
Both temporary and permanent substitutes are employed	4[6]	4.7	16[6]	8.6	22[6]	5.5	1[6]	.2	3[6]	.7	46[6]	3.1
Total number reporting	85	100.0	187	100.0	398	100.0	410	100.0	399	100.0	1479	100.0

Read table as follows: Of the 85 cities over 100,000 in population reporting, 80, or 94.1 percent, indicated that all substitutes are on temporary basis, receiving a flat rate per day; 1, or 1.2 percent, indicated that all substitutes are on permanent full-time basis, receiving regular monthly salary, etc. Similarly read figures for other population groups.

This tabulation is based on replies to question 26 of the inquiry blank reproduced on pages 72-75.

[1] One of these cities reported that after a substitute remains in the same position for 3 months or more, he is paid according to regular salary schedule.

[2] Three of these cities reported that after a substitute remains in the same position for a specified period, he is paid the regular teacher's salary.

[3] Four of these cities reported that after a substitute remains in the same position for a specified period, he is paid the regular teacher's salary, and one reported that elementary substitutes are paid on a temporary basis at a flat rate per day while high-school substitutes are paid monthly on a full-time basis.

[4] Three of these cities reported that after a substitute remains in the same position for a specified period, he is paid the regular teacher's salary.

[5] One of these cities reported that elementary substitutes are paid 75 percent of regular teacher's salary and high-school substitutes are paid a flat rate per day.

[6] Out of a total of 46 cities in all population groups which reported employing both temporary and permanent substitutes, 44 indicated that their temporary substitutes are paid a flat rate per day. The remaining two cities—one in cities 10,000 to 30,000 in population and the other in cities 2,500 to 5,000 in population—indicated that their temporary substitutes are paid in some direct proportion to the salary of the absent teacher.

temporary substitute's pay is changed after he has been teaching in a given classroom for several weeks. The second class of substitutes is composed of those who are employed on a full-time, annual basis, with a regular monthly salary, in recognition of the fact that there will be enough absence to justify their continuous employment. Table 12 shows the types of substitutes employed by city school systems in 1930-31. While a few cities reported that all of their substitutes are on a full-time basis, and a few others indicated that both temporary and permanent substitutes are employed, the almost universal practice is to employ all substitutes on a *per diem* basis for days of actual teaching. In some cities (for example, Minneapolis, Omaha, and Cleveland) the daily rate of pay increases with years of experience in substitute service.

A recent editorial on substitute service emphasizes the need for outstanding ability in substitute teachers if the classes of absent teachers are to maintain their standard of achievement and conduct.[1] The solution to the problem of substitute service proposed in this editorial is that of employing substitute teachers for full time, demanding of them the highest qualifications, and paying them adequate salaries.

Conditions for granting leaves of absence with pay—Personal illness of the teacher and death in the immediate family are the most commonly recognized reasons for leave of absence, but many others deserve consideration. One fairly complete list is that given in the rules of the Boston public schools, as shown in Table 13.

A study of teacher absence in the Baltimore schools during 1927-28 shows the proportion of total absence due to each of seven causes.[2] The leave-of-absence policy in Baltimore provides sick leave on half pay—65 days to teachers who have been less than 10 years in service, and 130 days to teachers who have been employed 10 years or more. Leave of absence on full pay is allowed for death in the family (4 days), visiting schools (2 days), and an indefinite number of days for attending educational meetings and for responding to court summons in cases not concerning the teacher's personal interest. Table 14 shows the relative incidence of these and certain other causes of absence in the Baltimore schools. Although the teachers' ill health was responsible for 83 percent of the absence, nearly a fifth was for reasons other than sickness. The provisions made by many school systems for leave of absence in the case of severe illness or death in the immediate family would seem justified by this distribution.

TABLE 13.—CONDITIONS UNDER WHICH LEAVES OF ABSENCE WITH PAY MAY BE GRANTED TO TEACHERS AND SUPERVISORS IN THE BOSTON PUBLIC SCHOOLS[1]

Causes of absence[2]	Amount of leave with:	
	Part pay	Full pay
1. Personal illness	1 year	3 days[3]
2. Weddings	1 day	
In the immediate family	.....	1 day
3. Ordinations or entrance into religious orders	1 day	
In the immediate family	.....	1 day
4. Death in the immediate family	.....	5 days[4]
5. Critical illness in the immediate family (in each school year)	20 days	
6. Attendance at the funeral of a teacher or school officer in the employ of the city, or of a principal emeritus	.....	1 day
7. Attendance at funerals	1 day	
When travel is required, not more than	2 days	
8. To act as readers for college entrance examination board	.....	Unspecified
9. Jewish holy days	3 days	
10. Service in state teachers' institutes, or to take part in teachers' associations (in each school year)	.....	3 days
11. Court attendance on school business	.....	Unspecified
12. To take promotional examinations or examinations for certificates of qualification	.....	Unspecified
13. To receive a degree at a college or university	.....	1 day
14. Visiting other schools	.....	2 days
15. Physical incapacity caused by accidents which occur during the performance of duty on premises under the control of the School Committee	.....	3 months

[1] Boston, Mass. *Rules of the School Committee and Regulations of the Public Schools of the City of Boston.* School Document No. 14, 1926. Boston: Printing Department, 1927. p. 146. *Amendments to the Rules and Regulations,* Secretary's Circular No. 2, 1928-29. p. 9.

[2] Extended leaves of absence for study, travel or rest are not included in this table.

[3] For directors and principals.

[4] Consecutive calendar days, which period shall include and may also immediately precede or immediately follow the day of the death.

[1] "When a Teacher Becomes Ill, Who Shall Take Her Place?" *Nation's Schools* 8: 74; July, 1931.

[2] Chapman, H. B. *Statistical Report for the School Year, 1927-28: Absence of Teachers.* Baltimore, Md.: Bureau of Research, Department of Education, 1928. Table 28.

When leave of absence is granted because of death in the immediate family a question of definition may arise, and many such rules have been supplemented by a list of the relatives making up the "immediate family." A commonly accepted interpretation is to include parents, husband or wife, children, brothers and sisters.[1] Aunts, uncles, nieces, nephews, grandparents, and relatives by marriage are sometimes included, and some rules avoid the question by providing leave of absence on account of "the death or serious illness of a relative."

TABLE 14. — CAUSES OF ABSENCE AMONG BALTIMORE SCHOOL TEACHERS IN 1927-28[1]

Cause of absence	Percent of total absence
Personal illness	83.0
Family affairs (including illness in family)	3.7
Deaths and funerals	4.0
Personal business	1.4
Visiting schools	.7
Other causes	7.2
Total	100.0

[1] Chapman, H. B. *Statistical Report for the School Year, 1927-28: Absence of Teachers.* Baltimore, Md.: Bureau of Research, Department of Education, 1928. Table 28.

Three of the many other reasons for leave of absence—visiting schools, attending educational meetings, and observance of religious holidays—were given separate mention in the questionnaire. Table 15 shows the number and percent of the city school systems in 1930-31 which grant leave of absence with some salary for various specific reasons. Of the 1,486 cities reporting, 90 percent grant such leave on account of personal illness, and 80 percent do so in case of death in the teacher's immediate family. Visiting other schools and attending educational meetings are recognized reasons for some leave of absence with pay in 63 percent and 65 percent of these cities, respectively. Only 10 percent, however, grant such leave for religious holidays. Other reasons, such as court summons, weddings, and funerals of friends were mentioned by 7 percent of the cities.

In general, brief leaves of absence with some salary are granted by a larger proportion of the cities in the larger population groups than in the smaller population groups. For example, such leave is allowed for personal illness by 96 percent of the cities over 100,000 and by only 84 percent of those from 2,500 to 5,000 in population. Leave on account of death in the family is granted by 95 percent of the cities over 100,000 and by only 67 percent of those from 2,500 to 5,000 in population.

Comparative data indicate an increase between 1923 and 1928 in the percentage of cities granting leave of absence with some salary on account of personal illness. Of the 972 cities reporting in 1923, 83 percent allowed sick leave with pay, while of 1,495 cities replying in 1928, 92 percent allowed such leave. The increase was most marked among cities of 2,500 to 5,000 in population, where the proportion rose from 69 percent to 85 percent. Between 1928 and 1931, however, no significant change in the situation seems to have occurred in any population group.[2]

Amount of leave and proportion of salary granted—Earlier in this discussion three criteria were suggested for determining the amount of leave and the remuneration to be allowed absent teachers in any school system: (1) the lengths of absence among teachers for various reasons, (2) the financial ability of the local system, and (3) current practice in other communities.

The data available with respect to the first of these criteria are of only limited application because the amount of teacher absence in any given school system may differ markedly from that in other systems. The studies summarized by Rogers indicate an average of 3.5 days of absence per year among women teachers as compared with 8.4 days for women in other occupations.[3] Carrothers' study in 1922-23 revealed an average of 2.1 days of illness per teacher in Springfield, Massachusetts; 4.9 days in Cleveland, Ohio; and 3.5 days in Denver, Colorado.[4] In Highland Park, Michigan, an average of 5.5 days was reported in 1927-28.[5]

[1] Hill, Clyde W., chairman. *Report on Sick Leave for Teachers, Based upon Returns from a Questionnaire Sent to Seventy-Six Cities in the United States.* Prepared for the Dallas Teachers' Association by the Committee To Study Sick Leave. Dallas, Texas: the Association, May 12, 1930. (Typewritten) p. 8.

[2] See footnote on page 41 for explanation of the assumptions and methods involved in the comparison of data for different years.

[3] Rogers, James F. *The Health of the Teacher.* U. S. Department of the Interior, Bureau of Education, School Health Studies, No. 12. Washington, D. C.: Government Printing Office, 1926, p. 6.

[4] Carrothers, George E. *The Physical Efficiency of Teachers.* Contributions to Education, No. 155. New York: Bureau of Publications, Teachers College, Columbia University, 1924, p. 65.

[5] Allen, I. M. *Amount of Annual Sick Leave Allowed.* Highland Park, Michigan: Public Schools, 1929. (Mimeographed.)

In general, it appears that women teachers are absent about twice as much as men, and married women somewhat more than single women.[1] It is not implied here that the amount of sick leave allowed with pay should be determined solely by the average number of days of absence in the school system. Probably the total number of days allowed should be somewhat greater than this average, so as to meet the needs of at least some of the teachers who are unavoidably absent for long periods.

Application of the second criterion, the ability of the school system to pay the cost of leaves of absence, is entirely a local matter. In fact, the question is often one of willingness rather than one of ability. The probable cost of a proposed leave-of-absence plan should, of course, be calculated. The figures collected by Rogers, Carrothers, and others as to the number of days of illness among teachers suggest that the average amount of money needed per teacher would not be large, even if full pay were granted during all absences due to illness. In Gary, Indiana, the board sets aside $30 a year for each teacher in a sick-leave fund which the teachers help administer. In Cicero, Illinois, $35 per teacher is allotted for sick leave.

One superintendent who has made a careful study of the sick-leave situation in his own city makes the following recommendations regarding the financing of a plan of sick leave:

The total number of days of absenteeism due to illness of teachers should be determined by statistical studies, and the amount of money needed to provide substitute service for such absenteeism should be appropriated as a separate item of the budget apart from the usual appropriation for contract salary of teachers.

The number of days enumerated for sick leave within a system should not exceed the number of days for which substitute service has been anticipated.[2]

Information concerning the third criterion suggested, that of current practice in other school systems, is presented in Tables 16 to 22. These tables may be summarized as follows:

1. Of the cities which grant brief leaves of absence with some salary, a large majority allow full salary for at least a part of the leave. This is true with respect to each of the causes for absence listed in Table 16. The proportion of these cities allowing full pay varies from 75 percent in case of absence due to personal illness, to 95 percent in case of absence to visit other schools or to attend educational meetings. It is surprising, however, to discover that only about 58 percent of the cities over 100,000 in population allow full pay during sick leave. Among the other population groups, the corresponding percentage varies from 73 to 78.

2. A considerable number of cities in each population group reported that the number of days a teacher is absent with pay for reasons other than personal illness is deducted from the total number of days allowed for sick leave.

3. Table 17 shows that of the 1,264 cities answering the question in 1931, 177, or 14 per-

[1] Carrothers, George E. *op. cit.* p. 34. Rogers, James F. *op. cit.* p. 6.
[2] "Sick Leave Allowances for Teachers." (Editorial.) *American School Board Journal* 78: 69; May, 1929.

TABLE 15.—BRIEF LEAVES OF ABSENCE WITH SOME SALARY GRANTED FOR VARIOUS REASONS IN 1930-31

Leave granted with some salary for:	Cities over 100,000 in population		Cities 30,000 to 100,000 in population		Cities 10,000 to 30,000 in population		Cities 5,000 to 10,000 in population		Cities 2,500 to 5,000 in population		All cities reporting	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7	8	9	10	11	12	13
Personal illness	82	96.5	181	96.3	375	94.0	366	88.8	336	83.6	1340	90.2
Death in immediate family	81	95.3	177	94.1	345	86.5	318	77.2	271	67.4	1192	80.2
Visiting other schools	60	70.6	142	75.5	267	66.9	249	60.4	221	55.0	939	63.2
Attending educational meetings	54	63.5	133	70.7	262	65.7	262	63.6	260	64.7	971	65.3
Religious holidays	18	21.2	27	14.4	35	8.8	34	8.3	35	8.7	149	10.0
Other reasons[1]	19	22.4	23	12.2	21	5.3	14	3.4	22	5.5	99	6.7
Total cities reporting	85	100.0	188	100.0	399	100.0	412	100.0	402	100.0	1486	100.0

Read table as follows: Of the 85 cities over 100,000 in population which reported policies concerning the granting of brief leaves of absence with some salary, 82, or 96.5 percent, grant such leave in cases of illness; 81, or 95.3 percent, grant such leave in cases of death in the immediate family, etc. Similarly read figures for other population groups.
This tabulation is based on replies to questions 24-a and 25 of the inquiry blank reproduced on pages 72-75.
[1] Other reasons include: Court summons, funerals of friends, weddings, and teachers' institutes.

TABLE 16.—FULL PAY OR PART PAY ALLOWED DURING BRIEF LEAVES OF ABSENCE IN CITIES GRANTING LEAVE WITH SOME PAY IN 1930-31

Full pay or part pay only allowed during leave for:	Cities over 100,000 in population		Cities 30,000 to 100,000 in population		Cities 10,000 to 30,000 in population		Cities 5,000 to 10,000 in population		Cities 2,500 to 5,000 in population		All cities reporting	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7	8	9	10	11	12	13
Personal illness:												
Full salary	48	58.5	141	77.9	286	76.3	284	77.6	245	72.9	1004	74.9
Less than full salary	34	41.5	40	22.1	89	23.7	82	22.4	91	27.1	336	25.1
Total cities granting some salary	82	100.0	181	100.0	375	100.0	366	100.0	336	100.0	1340	100.0
Death in immediate family:												
Full salary	72	88.9	156	88.1	309	89.6	282	88.7	222	81.9	1041	87.3
Less than full salary	9	11.1	21	11.9	36	10.4	36	11.3	49	18.1	151	12.7
Total cities granting some salary	81[2]	100.0	177[3]	100.0	345[4]	100.0	318[5]	100.0	271[6]	100.0	1192	100.0
Visiting other schools:												
Full salary	59	98.3	134	94.4	261	97.8	234	94.0	202	91.4	890	94.8
Less than full salary	1	1.7	8	5.6	6	2.2	15	6.0	19	8.6	49	5.2
Total cities granting some salary	60	100.0	142[7]	100.0	267[8]	100.0	249[9]	100.0	221[9]	100.0	939	100.0
Attending educational meetings:												
Full salary	54	100.0	126	94.7	253	96.6	247	94.3	242	93.1	922	95.0
Less than full salary	.....	.....	7	5.3	9	3.4	15	5.7	18	6.9	49	5.0
Total cities granting some salary	54	100.0	133[10]	100.0	262[11]	100.0	262[11]	100.0	260[12]	100.0	971	100.0
Religious holidays:												
Full salary	9	50.0	22	81.5	32	91.4	29	85.3	28	80.0	120	80.5
Less than full salary	9	50.0	5	18.5	3	8.6	5	14.7	7	20.0	29	19.5
Total cities granting some salary	18	100.0	27[13]	100.0	35[14]	100.0	34[14]	100.0	35[13]	100.0	149	100.0
Other reasons[1]:												
Full salary	13	68.4	17	73.9	17	81.0	13	92.9	19	86.4	79	79.8
Less than full salary	6	31.6	6	26.1	4	19.0	1	7.1	3	13.6	20	20.2
Total cities granting some salary	19	100.0	23	100.0	21	100.0	14	100.0	22	100.0	99	100.0

Read table as follows: Of the 82 cities over 100,000 in population which reported leave with some pay granted for illness, 48, or 58.5 percent, grant such leave with full salary, while 34, or 41.5 percent, grant something less than full salary during such leave. Similarly read figures for absences for other reasons and for other population groups.

This tabulation is based on replies to questions 24-a and 25 of the inquiry blank reproduced on pages 72-75.

[1] Other reasons include: Court summons, funerals of friends, weddings, teachers institutes, etc.

[2] Seven of these cities reported that the number of days a teacher is absent with pay for death in immediate family is deducted from the total number of days allowed for sick leave.

[3] Forty-two of these cities reported that the number of days a teacher is absent with pay for death in immediate family is deducted from the total number of days allowed for sick leave.

[4] One hundred of these cities reported that the number of days a teacher is absent with pay for death in immediate family is deducted from the total number of days allowed for sick leave.

[5] One hundred and fifteen of these cities reported that the number of days a teacher is absent with pay for death in immediate family is deducted from the total number of days allowed for sick leave.

[6] Eighty-eight of these cities reported that the number of days a teacher is absent with pay for death in immediate family is deducted from the total number of days allowed for sick leave.

[7] Four of these cities reported that the number of days a teacher is absent with pay for visiting other schools is deducted from the total number of days allowed for sick leave.

[8] Five of these cities reported that the number of days a teacher is absent with pay for visiting other schools is deducted from the total number of days allowed for sick leave.

[9] Three of these cities reported that the number of days a teacher is absent with pay for visiting other schools is deducted from the total number of days allowed for sick leave.

[10] Two of these cities reported that the number of days a teacher is absent with pay for attending educational meetings is deducted from the total number of days allowed for sick leave.

[11] Five of these cities reported that the number of days a teacher is absent with pay for attending educational meetings is deducted from the total number of days allowed for sick leave.

[12] Three of these cities reported that the number of days a teacher is absent with pay for attending educational meetings is deducted from the total number of days allowed for sick leave.

[13] Two of these cities reported that the number of days a teacher is absent with pay on religious holidays is deducted from the total number of days allowed for sick leave.

[14] One of these cities reported that the number of days a teacher is absent with pay on religious holidays is deducted from the total number of days allowed for sick leave.

cent, permit days of unused sick leave to accumulate from year to year. The proportion of cities using the cumulative plan is greater in the larger population groups than in the smaller ones.

4. Tables 18 to 22 reveal that the amount of sick leave allowed with full pay varies rather widely. Ten days is the most common allowance among cities in the two largest population groups, while five days is the most common among the smaller cities. The practice of allowing less than five days is uncommon and is limited primarily to the smaller cities. Leaves of more than 14 days with full pay are not generally allowed, although a number of cities, chiefly among the larger ones, grant 20, 25, or even 30 days of sick leave on full pay. Indefinite provisions are found more frequently in the smaller cities than in the larger ones.

5. A considerable number of school systems in each population group allow some days of sick leave on full pay and additional days on less than full pay.

6. The plan of allowing sick leave at full salary less the pay of the substitute teacher is used much more commonly in the smaller than in the larger cities.

Financial protection against long illnesses—It is not to be expected that all school boards should carry at full salary every teacher who is prostrated by long and serious illness, although there are school systems finding it advantageous to follow just this policy. The plan of sick leave, however, should recognize the fact that a small percentage of teachers will be absent for long periods because of illness. In Springfield, in 1922-23, it was found that about 7 percent of the women teachers were absent more than 10 days on account of illness; and in Cleveland the corresponding percentage was about 10.[1]

The cumulative plan, whereby unused portions of the annual sick-leave allowance accrue to the benefit of the teacher, is frequently recommended as a way by which a teacher can build up a reserve for the long sickness which may come. This should work well, provided the long sickness does not come before the reserve is built up. It appears to be a great improvement over the plan of allowing a certain number of days a year regardless of length of service or previous good record of health. Table 17 reveals an increase since 1928 in the number of city school systems providing cumulative sick leave. Of the 1,177 cities reporting sick-leave provisions in 1928, 8 percent used the cumulative plan; while of the 1,264 cities granting sick leave in 1931, 14 percent used the cumulative plan. In both years the proportion of school systems providing cumulative leave was greater in the larger population groups than in the smaller ones. Among cities over 100,000, this proportion increased from 10 percent to 23 percent; while among cities 2,500 to 5,000 in population, it increased from about 3 percent to 9 percent during the three-year period.[2]

There are a few cities in which a plan of cumulative sick leave has been merged with sabbatical leave. Among the cities reporting this plan are Pontiac, Michigan; Troy, New York;

[1] Carrothers, George E. *The Physical Efficiency of Teachers.* Contributions to Education, No. 155. New York: Bureau of Publications, Teachers College, Columbia University, 1924. p. 63-64.

[2] See footnote on page 41 for explanation of the assumptions and methods involved in the comparison of data for different years.

TABLE 17.—FREQUENCY OF CUMULATIVE SICK-LEAVE PLANS IN 1927-28 AND 1930-31

Sick leave with pay cumulative	Cities over 100,000 in population		Cities 30,000 to 100,000 in population		Cities 10,000 to 30,000 in population		Cities 5,000 to 10,000 in population		Cities 2,500 to 5,000 in population		All cities reporting	
	1928	1931	1928	1931	1928	1931	1928	1931	1928	1931	1928	1931
1	2	3	4	5	6	7	8	9	10	11	12	13
Number of cities	7	18	23	41	37	56	16	35	10	27	93	177
Percent of cities	9.6	23.1	14.0	24.1	10.9	15.7	5.1	10.0	3.5	8.7	7.9	14.0
Total number reporting	73	78	164	170	339	356	316	349	285	311	1177	1264

Read table as follows: Of the 73 cities over 100,000 in 1927-28 which reported sick leave with pay and also answered the question regarding cumulative leave, 7, or 9.6 percent, used the cumulative plan. Of the 78 cities over 100,000 in 1930-31 which reported sick leave with pay and also answered the question as to cumulative leave, 18, or 23.1 percent, use the cumulative plan. Similarly read figures for other population groups.

and Schenectady, New York.[1] In these cities, teachers with an excellent health record are permitted to use the accumulated days of sick leave, with part or full pay, for purposes of professional growth.

Group health insurance is being utilized in some school systems as a protection against the longer periods of absence. Disability insurance of the type carried in Evansville, Indiana; Detroit, Michigan; Omaha, Nebraska; and in Bellingham and Seattle, Washington, provides weekly benefits for illness, beginning after a waiting period varying from 3 to 14 days.[2] Although the cost of such insurance in these cities is borne entirely by the teachers, the cen-

TABLE 18.—AMOUNT OF SICK LEAVE AND PROPORTION OF SALARY GRANTED IN CITIES OVER 100,000 IN POPULATION IN 1930-31

Number of days granted	Full salary	Half salary	Full salary less pay of substitute	Some other fraction of salary
1	2	3	4	5
5– 9	11[1]	1[6]	.....	1
10–14	25[2]	5[7]	2[11]	2[12]
15–19	3[3]	1	.....	1[13]
20–24	6[4]	7[8]	1	1
25–29	1[5]	3[9]	.....	.....
30 and over	.....	3[10]	2	3
No definite number	2	.....	.....	1
Total	48	20	5	9

Read table as follows: Of the 48 cities over 100,000 in population granting sick leave with full salary, 11 cities reported between 5 to 9 days allowed, 25 reported between 10 to 14 days, etc. Similarly read data for other salary groups.

This tabulation is based on replies to question 24 of the inquiry blank reproduced on pages 72-75.

[1] Eight of these 11 cities grant additional days leave with something less than full salary.

[2] Seven of these 25 cities grant additional days leave with something less than full salary; and 1 city reported "10 to 20 days, depending on length of service."

[3] One of these 3 cities grants additional days leave with something less than full salary.

[4] Two of these 6 cities grant additional days leave with something less than full salary; 2 cities reported "from 20 to 60 days, depending on length of service"; 1 city reported "plus an additional day for each year of service."

[5] This city grants additional days leave with something less than full salary.

[6] This city reported "1 to 4 weeks, depending on length of service."

[7] One of these 5 cities grants additional days leave with something less than half salary; and 1 city reports "10 to 100 days, depending on length of service."

[8] One of these 7 cities varies as to number of days, depending on length of service.

[9] One of these 3 cities reported "8 additional days leave, depending on length of service."

[10] One of these 3 cities reported "65 to 130 days leave, depending on length of service."

[11] One of these 2 cities reported "one-half month to four and one-half months leave, depending on length of service"; and 1 city reported "10 to 100 days."

[12] One of these 2 cities reported "10 days salary, less deduction of $2.00 in elementary schools and $2.50 in high schools, is allowed, plus an additional 10 weeks at full salary less pay of substitute."

[13] This city reported "1 additional day for each year of service, up to 15 days."

TABLE 19.—AMOUNT OF SICK LEAVE AND PROPORTION OF SALARY GRANTED IN CITIES 30,000 TO 100,000 IN POPULATION IN 1930-31

Number of days granted	Full salary	Half salary	Full salary less pay of substitute	Some other fraction of salary
1	2	3	4	5
Under 5	7[1]	.....	.....	.....
5– 9	43[2]	1[7]	.....	1
10–14	74[3]	4[8]	1	5
15–19	7[4]	1	.....	.....
20–24	3[5]	8	3[10]	2
25–29	.....	.....	.....	.....
30 and over	3[6]	3[9]	5	2
No definite number	4	.....	3	1[11]
Total	141	17	12	11

Read table as follows: Of the 141 cities 30,000 to 100,000 in population granting sick leave with full salary, 7 reported under 5 days allowed; 43 reported between 5 and 9 days, etc. Similarly read data for other salary groups.

This tabulation is based on replies to question 24 of the inquiry blank reproduced on pages 72-75.

[1] Two of the seven cities grant additional days leave with something less than full salary; 1 reported "4 to 10 days, depending on length of service"; and 1 reported "13 to 18 days."

[2] Twenty-six of these 43 cities grant additional days leave with something less than full salary; 1 grants additional days leave with something less than full salary, and an additional day for each year of service; 1 reported "5 to 40 days, depending on length of service"; 1 reported "5 to 15 days, depending on length of service"; 1 reported "5 to 30 days, depending on length of service"; 1 reported "7 to 21 days, depending on length of service"; and 1 varies from 5 to 50 days.

[3] Twenty-six of these 74 cities grant additional days leave with something less than full salary; and 1 reported "10 to 20 days, depending on length of service."

[4] One of these 7 cities reported "15 to 30 days, depending on length of service," and 1 reported "15 to 30 days, depending on length of service and an additional 30 days with something less than full pay."

[5] One of these 3 cities grants additional days leave with something less than full salary.

[6] These 3 cities grant additional days leave with something less than full salary.

[7] This city reported "5 to 20 days, depending on length of service."

[8] Two of these 4 cities grant additional leave with something less than half salary.

[9] One of these 3 cities grants additional leave with something less than half salary.

[10] One of these 3 cities grants additional leave with something less than full salary less pay of substitute.

[11] Thirty-five dollars allowed in September. All salary deductions are made during the school year.

[1] See the next section, pages 62-64, for discussion of extended leaves of absence for professional or cultural improvement. The Schenectady plan is described in that section.

See also: "Teachers' Sick Leave Benefits at Pontiac, Michigan." *American School Board Journal* 78: 132-34; January, 1929.

National Education Association, Research Division. *Sabbatical Leave for Public School Teachers*. Washington, D. C.: the Association, 1927. p. 17.

[2] National Education Association, Department of Classroom Teachers. "The Economic Welfare of Teachers." *Sixth Yearbook*. Washington, D. C.: the Association, 1931. "Group Accident and Health Plans in Local Organizations," p. 68-73.

tral school administration in any city might well take the initiative in the development of such a plan, and might even contribute to its support if permitted by law.

Health insurance, of course, can be purchased much more cheaply if there is a waiting period of several days before disability benefits begin. For this reason, the allowance of several days of sick leave with pay is a great help to teachers in establishing financial security for long periods of illness without paying excessively high insurance premiums.

Mutual benefit plans, if financially sound, may also serve as a means of supplementing sick-leave allowances for teachers. For example, in Phoenix, Arizona, which has a cumulative sick-leave plan allowing 10 days a year on full pay, the need was felt for further protection,

TABLE 20.—AMOUNT OF SICK LEAVE AND PROPORTION OF SALARY GRANTED IN CITIES 10,000 TO 30,000 IN POPULATION IN 1930-31

Number of days granted	Full salary	Half salary	Full salary less pay of substitute	Some other fraction of salary
1	2	3	4	5
Under 5	22[1]	1	1	.....
5– 9	119[2]	1	1	.....
10–14	109[3]	10	3[7]	7[8]
15–19	6[4]	1	.....	.....
20–24	16[5]	11[6]	7	7
25–29	.....	1	.....	.....
30 and over	1	8	3	2
No definite number	13	3	19	3
Total	286	36	34	19

Read table as follows: Of the 286 cities 10,000 to 30,000 in population granting sick leave with full salary, 22 allow under 5 days; 119 allow from 5 to 9 days, etc. Similarly read data for other salary groups.

This tabulation is based on replies to question 24 of the inquiry blank reproduced on pages 72-75.

[1] Eleven of these 22 cities grant additional days leave with something less than full salary; and one city reported "3 to 10 days, depending on length of service."

[2] Forty-two of these 119 cities grant additional days leave with something less than full salary; 1 city reported "5 to 15 days, depending on length of service"; 1 city reported "5 to 20 days, depending on length of service"; and 1 city reported "7½ to 30 days."

[3] Thirty-two of these 109 cities grant additional days leave with something less than full salary; 1 city reported "10 to 28 days, depending on length of service"; 1 city reported "10 to 20 days, depending on length of service"; and 1 city reported "11 to 40 days, depending on length of service."

[4] One of these 6 cities grants additional days leave with something less than full salary.

[5] Six of these 16 cities grant additional days leave with something less than full salary and 2 cities reported "20 to 40 days, depending on length of service."

[6] One of these 11 cities grants additional days leave with something less than half salary.

[7] One of these 3 cities reported "10 to 60 days leave, depending on length of service."

[8] One of these 7 cities reported "2 weeks plus 1 week additional leave for each year of service."

[1] *Ibid.* p. 81-82.

TABLE 21.—AMOUNT OF SICK LEAVE AND PROPORTION OF SALARY GRANTED IN CITIES 5,000 TO 10,000 IN POPULATION IN 1930-31

Number of days granted	Full salary	Half salary	Full salary less pay of substitute	Some other fraction of salary
1	2	3	4	5
Under 5	28[1]	.....	1	.....
5– 9	141[2]	4	2	1
10–14	89[3]	9	6[4]	3
15–19	2	.....	.....	.....
20–24	7	10	5	2
25–29	.....	.....	.....	.....
30 and over	3	1	3	1
No definite number	14	3	25	6
Total	284	27	42	13

Read table as follows: Of the 284 cities 5,000 to 10,000 in population granting sick leave with full salary, 28 allow under 5 days, 141 allow from 5 to 9 days, etc. Similarly read data for other salary groups.

This tabulation is based on replies to question 24 of the inquiry blank reproduced on pages 72-75.

[1] Nine of these 28 cities grant additional days leave with something less than full salary.

[2] Thirty of these 141 cities grant additional days leave with something less than full salary; 1 city reported "5 to 10 days leave depending on length of service;" 2 cities reported "5 to 20 days leave depending on length of service;" 1 city reported "5 to 30 days leave depending on length of service;" and 2 cities reported that upon recommendation of the Board of Education or the Superintendent, additional leave may be granted in case of prolonged illness.

[3] Eighteen of these 89 cities grant additional days leave with something less than full salary; 1 city reported "10 days leave plus 1 additional day for each year of service;" and 2 cities reported "10 to 30 days depending on length of service."

[4] One of these 6 cities reported "10 to 30 days leave depending on length of service."

and a mutual benefit association was organized with the encouragement and support of the school administration. The annual dues of $7.50 provide a sick benefit of $5.00 a day, beginning after the period of cumulative leave has expired, and continuing for not more than 12 weeks. The cost of overhead administration is carried by the school system.[1]

In this connection it should be noted that most state teacher retirement systems and some city systems grant disability allowances to members who are presumably permanently incapacitated for further service. Many of these systems make it a practice to give the teacher the benefit of any doubt concerning the probable permanence of the disability.

Safeguarding the leave-of-absence privilege against abuse—It is only fair to the large proportion of teachers who render devoted and conscientious service that leave-of-absence privileges be safeguarded against malingering. There appears to be little evidence, however,

that this is a serious problem in most school systems. Nearly every study of teacher absence reveals a considerable percentage of teachers who have rendered the year's service with no absence because of sickness. Carrothers found that 72 percent of the Springfield women teachers and 21 percent of those in Cleveland missed no days because of illness in 1922-23.[1] A study in Highland Park, Michigan, where 20 days of leave are allowed on full pay, shows that 25 percent of the teachers took no sick leave at all during the year.[2]

Perhaps some notion as to the presence or absence of malingering in a teaching staff may be obtained by examining a distribution of the teachers according to the amount of their absence during the year. Following is such a distribution adapted from data in the Highland Park study referred to above:[3]

Number of teachers taking no sick leave	98
" " " absent 1-5 days	165
" " " " 6-10 days	71
" " " " 11-15 days	32
" " " " 16-20 days	14
" " " " 21-25 days	5
" " " " 26-30 days	3
" " " " 31-35 days	2
" " " " 36-41 days	7
Total number of teachers	397

This distribution shows no tendency for absence to pile up at the maximum allowance of 20 days with full pay. In fact, the number of teachers absent 21 days or longer was slightly greater than the number absent from 16 to 20 days.

Evidence is sometimes found, however, to suggest that a few teachers take the maximum number of days of sick leave without adequate justification. Carrothers reports such a tendency in one of the cities he studied.[4]

A frequently cited advantage of the cumulative sick-leave policy is that it reduces the tendency to take the maximum annual sick-leave allowance. Another safeguard frequently used is to require a doctor's certificate if absence extends beyond a specified period. In some cities a statement from the principal is all that is required as a basis for granting leave of absence, either for sickness or for other causes. In a few systems the school nurse visits teachers who are sick, both to render service to the absent teachers and to insure against abuse of sick-leave privileges. The alert principal will observe flagrant cases of neglect of duty, and will take official action to correct such conditions. Careful administration by principals, reasonable precaution in checking up on long absences due to sickness, and an accurate system of health and absence records should afford ample protection to the school system.

TABLE 22.—AMOUNT OF SICK LEAVE AND PROPORTION OF SALARY GRANTED IN CITIES 2,500 TO 5,000 IN POPULATION IN 1930-31

Number of days granted	Full salary	Half salary	Full salary less pay of substitute	Some other fraction of salary
1	2	3	4	5
Under 5	32[1]	1	.....	.....
5–9	126[2]	4	2	1
10–14	69[3]	12[5]	5	.....
15–19	2[4]	1	1	.....
20–24	6	9	.....	.....
25–29	.....	.....	.....	.....
30 and over	.....	.....	3	.....
No definite number	10	2	43	7
Total	245	29	54	8

Read table as follows: Of the 245 cities 2,500 to 5,000 in population granting sick leave with full salary, 32 allow under 5 days; 126 allow from 5 to 9 days, etc. Similarly read data for other salary groups.

This tabulation is based on replies to question 24 of the inquiry blank reproduced on pages 72-75.

[1] Eleven of these 32 cities grant additional days sick leave with something less than full salary; and one city reported "3 to 5 days depending on length of service."

[2] Twenty-six of these 126 cities grant additional days sick leave with something less than full salary; 5 cities reported "5 to 10 days, depending on length of service"; one city reported "5 to 15 days, depending on length of service"; one city reported "5 to 30 days, depending on length of service"; and one city grants an additional day's leave for each year of service.

[3] Ten of these 69 cities grant additional days sick leave with something less than full salary; and 2 cities reported "10 to 15 days, depending on length of service."

[4] One of these 2 cities reported "15 to 30 days, depending on length of service."

[5] One of these 12 cities grants additional days sick leave with something less than half salary.

The fact should not be overlooked that teachers who attempt to meet their classes when physically unfit to do so may also be abusing the sick-leave privilege by failing to take advantage of it. Teachers should be encouraged to take the day or two of sick leave that may enable them to ward off a longer attack of illness, and per-

[1] Carrothers, George E. *op. cit.* p. 63-64.
[2] Allen, I. M. *Amount of Annual Sick Leave Allowed.* Highland Park, Michigan: Public Schools, 1929. Table 6.
[3] *Ibid.* Tables 8 and 9.
[4] Carrothers, George E. *op. cit.* p. 69-72.

fect attendance records should not be too much emphasized as a criterion of efficiency.

Reducing ill health to a minimum—As shown in an earlier section, the physical examination of candidates for teaching positions is required in about 16 percent of the cities cooperating in this study. Nearly 50 percent of the cities over 100,000 in population require such examinations.

The results of physical examinations, when made with care by a competent school physician, should be indispensable in the selection of new teachers. In Los Angeles, applicants are classified on the basis of the health examination as follows:[1]

1. Excellent, fully serviceable.
2. Below normal, but passable, unless other marks detract considerably from applicant's general condition.
3. Not serviceable for school duties of the type applied for.

Adequate physical examination of entrants to teacher-training institutions would operate even earlier to debar physical weaklings from the teaching profession.

The importance of happy and healthful working conditions for teachers cannot be overemphasized. The bibliography at the end of this bulletin refers to several discussions of this vital topic.[2] Among the environmental factors contributing to the better health of teachers, the following are emphasized: proper ventilation, heating, and cleanliness of schoolhouses; provision for rest periods during the day; adequate rest rooms for teachers; periodic medical examination and nurse service; and avoidance of overloaded teaching schedules. The tendency of many school systems to increase the teaching load as an economy measure in times of financial stress is likely to take heavy toll in reducing the health and efficiency of teachers.

Need for further study—The preceding discussion indicates that additional research and more critical evaluation of experience are necessary to determine the type of plan for granting leaves of absence to teachers which will contribute most to the welfare of the schools. City school officials seem to be generally agreed that some leave of absence with pay should be granted for imperative personal reasons, especially for personal illness and for death in the immediate family. The general practice among city systems which grant such leave, moreover, is to allow full pay during at least a part of the absence. There is far less agreement, however, with respect to the amount of leave with pay which should be allowed for the various causes. Until this and other questions are subjected to more intensive study, information of the kind presented in this section may be helpful to administrators in formulating or modifying leave-of-absence policies. Although not conclusive, this material offers a better basis for policy-making than does unsupported individual opinion.

Importance of flexible administration—It is unlikely that even the best plan for granting leaves of absence can be made to work automatically with a high degree of success. The successful operation of such a plan requires intelligent and sympathetic administration. Wise leadership in explaining to teachers the purpose of the plan and the ultimate result of its abuse will do much to create a cooperative attitude on their part. Furthermore, the importance of administering leaves of absence on a human rather than on a mechanical basis can hardly be overemphasized. Nothing has yet replaced the human touch in personnel administration as an effective builder and conserver of high morale among workers. Given wise leadership and a staff of high-grade, professionally-minded teachers, it should be possible to operate effectively any well-devised plan for administering leaves of absence.

[1] Wood, Thomas D., chairman. *The Teacher's Health: What Some Communities Are Doing To Conserve It.* Monograph No. 4 School Health Bureau, Welfare Division. New York: Metropolitan Life Insurance Co., about 1928. p. 13.
[2] See particularly references numbered 32, 34, 36, 40, 42, 44, and 46.

Agreement in theory—School administrators generally agree that one means of encouraging a right professional attitude is the adoption of regulations which encourage, or at least make it possible for teachers to take leaves of absence for study, travel, or other approved means of improving their professional equipment.

Present practice in city school systems—This generally accepted theory, however, but partially finds its counterpart in practice. Table 23 indicates that of the 1,450 city school systems reporting, about 42 percent grant leaves of absence for professional improvement and only 20 percent grant leaves for travel. These low percentages are due principally to the situation in the smaller cities. In many of these communities the salaries of teachers are doubtless too low to permit the saving necessary for time off. Even if such saving is accomplished, the teacher often expects after a period of study or travel to move on to a community where conditions are more attractive. The percentage of cities granting extended leaves of absence bears a direct relationship to the size of the cities considered. For professional improvement it varies from about 26 percent in the smallest population group to 79 percent among cities over 100,000. For purposes of travel the proportion ranges from about 9 percent to 60 percent.

In all except the largest population group, more cities apparently grant extended leaves for rest and recuperation than for the purpose of travel. Of the entire number reporting, however, only 24 percent grant such leaves for rest.

Table 23 also shows the extent to which teachers in these cities receive pay while on extended leave for professional improvement, and the total number of teachers taking such leave in 1930-31 with some part of their salaries paid. Of the cities granting extended leave, 91 percent pay no salary to teachers during such leave. Most of the remaining cities pay one-half of the regular salary, while no city pays full salary to a teacher on leave for professional improvement. Variations among the different population groups are rather striking. Twenty-nine percent of the cities over 100,000 pay some fraction of the teacher's salary, while none of the cities below 5,000 pay any part of the salary.

In 1930-31 relatively few teachers were on extended leaves of absence with part of their salaries paid. Of the 1,952 such teachers reported, 1,710 were employed in New York City.

Why grant pay during extended leaves of absence?—The steady extension of the practice of granting a certain amount of leave with part or full pay suggests a general satisfaction with the plan. Sabbatical leave for college professors, a practice now widely followed, also appears to be working with success.[1] However, opponents of this policy still question whether the returns justify the cost. They urge, further, that the same amount spent on other means of encouraging professional growth may yield larger results with fewer administrative difficulties. Those favoring the plan of leave with pay, however, believe that it pays for itself by increasing school efficiency through improved cultural and professional standards among teachers. They point out also that such a plan makes it possible for teachers to make up deficiencies in their early preparation or to improve their mastery of the subject which they teach. The validity of these conflicting claims may eventually be decided through further experience and research.

Principles governing administration of sabbatical leave—Meanwhile when a plan of leave with pay is in force, it is desirable that it operate with maximum effectiveness. After detailed study of plans already in effect in thirty cities, a report of the National Education Association lists the following essential elements in an effective plan for sabbatical leave:

1. A period of uninterrupted teaching service prior to taking sabbatical leave.
2. A provision which will safeguard to the school system the use of sabbatical leave for purposes of professional growth.
3. Compensation during the period of sabbatical leave sufficient to make the leave possible without undue sacrifice by the teacher.

[1] Lemon, Allan C. "The Leave of Absence in Universities and Colleges." *Journal of Educational Research* 16: 210-12; October 1927.

4. A statement as to the number of teachers who may be on leave at one time without embarrassment to the school system.

5. An equitable basis for selecting the teachers to be granted leave, when more apply than may be absent at one time.

6. A period of leave long enough to make real professional study and growth possible.

7. A provision guaranteeing that the improved service of the teacher following sabbatical leave shall be rendered in the school system granting the leave.

8. Protection of the salary and retirement status of the teacher taking leave.

Plans in effect—A number of the plans for granting sabbatical leave are described in the references which supplement this bulletin. Two plans, those for Ann Arbor, Michigan, and Schenectady, New York, are given below. The latter plan, it will be noted, combines sick leave and sabbatical leave provisions.

TABLE 23.—EXTENDED LEAVES OF ABSENCE FOR PROFESSIONAL IMPROVEMENT, TRAVEL, AND REST IN 1930-31

Policy	Cities over 100,000 in population		Cities 30,000 to 100,000 in population		Cities 10,000 to 30,000 in population		Cities 5,000 to 10,000 in population		Cities 2,500 to 5,000 in population		All cities reporting	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7	8	9	10	11	12	13
Leave of absence granted:												
For professional improvement	67	78.8	119	64.0	180	46.4	147	36.5	103	26.5	616	42.5
For travel	51	60.0	69	37.1	73	18.8	60	14.9	37	9.5	290	20.0
For rest	47	55.3	74	39.8	100	25.8	83	20.6	48	12.4	352	24.3
Total number reporting	85[1]	100.0	186[2]	100.0	388[3]	100.0	403[4]	100.0	388[5]	100.0	1450	100.0
Amount of salary paid to teachers taking leave for professional improvement:												
Half salary	11	16.7	10	8.5	6	3.4	4[12]	2.7	.....	.....	31	5.1
Full salary less pay of substitute	5	7.6	7	6.0	3	1.7	4	2.7	.....	.....	19	3.1
Some other fraction of salary	3	4.5	1	.9	.....	.....	.....	.....	.....	.....	4	.7
No salary	47[6]	71.2	99[8]	84.6	167[10]	94.9	138[13]	94.6	102	100.0	553	91.1
Total number reporting	66	100.0	117	100.0	176	100.0	146	100.0	102	100.0	607	100.0
Number of teachers who took leave of absence of professional improvement with some salary in 1930-31	1890[7]	.....	45[9]	.....	7[11]	.....	10[11]	.....	0	.....	1952	.....

Read table as follows: Of the 85 cities over 100,000 which reported policy concerning the granting of extended leaves of absence; 67, or 78.8 percent grant such leave for professional improvement, 51, or 60 percent grant such leave for travel, etc. Of the 66 cities in this population group reporting amount of salary paid during leave for professional improvement, 11, or 16.7 percent allow half salary, 5, or 7.6 allow full salary less pay of substitute, etc. Similarly read figures for other population groups. This tabulation is based on replies to questions 20, 21 and 22 of the inquiry blank reproduced on pages 72-75.

[1] Eight of these cities also indicated that leave is granted for maternity; eight indicated that leave is granted for illness; two indicated that leave is granted for teaching in other systems; and one indicated that leave is granted for unspecified reasons.

[2] Two of these cities also indicated that leave is granted for maternity; five indicated that leave is granted for illness; one indicated that leave is granted for teaching in other systems; and four indicated that leave is granted for unspecified reasons.

[3] Two of these cities also indicated that leave is granted for maternity; ten indicated that leave is granted for illness; one indicated that leave is granted for teaching in other systems; and one indicated that leave is granted for unspecified reasons.

[4] One of these cities also indicated that leave is granted for maternity; nine, indicated that leave is granted for illness; and one indicated that leave is granted for unspecified reasons.

[5] Eight of these cities also indicated that leave is granted for illness.

[6] One of these 47 cities reported no salary but a $1000 added to salary during first three years after return to teaching duties; one reported no salary but $20 reimbursement per month for 50 months on return, and two reported half salaries sometimes allowed by special vote of school committee.

[7] With the exception of New York City, which reported 1710 teachers, the number of teachers taking leave with some salary for professional improvement, in individual cities in this population group, ranges from none to thirty-two.

[8] One of these 99 cities reported that leave with full pay is granted in cases where annual sick leave has accumulated.

[9] The number of teachers taking leave with some salary for professional improvement in this population group ranges from none to six.

[10] One of these 167 cities reported that "all tuition and matriculation charges plus $50 for each 16 points of approved work" is granted; one reported that half pay is granted only when teacher has earned the four advanced study increments and has been employed for ten years; one reported that one-third salary is granted in special cases; and another reported special cases are sometimes given some salary.

[11] The number of teachers taking leave with some salary for professional improvement in individual cities in this population group ranges from none to two.

[12] One of these four cities grant sixty percent of salary during leave for professional improvement.

[13] One of these 138 cities reported that healthy teachers may use their accumulated sick leave and one city reported that leave with full salary may be granted after long and satisfactory service by special action of board.

The Ann Arbor Plan[1]

1. After seven years of service as a teacher, administration officer, or librarian, one is eligible for a year's leave of absence.

2. A teacher who is granted a leave of absence of one year shall receive one-half of her regular salary for that year.

3. Regular annual salary increments shall be given for time of leave, the same as for regular services in school.

4. A teacher granted a leave of absence and receiving a salary under its provisions agrees to return to the Ann Arbor school system and teach for a period of three years or return to the Ann Arbor School District all or part of the salary paid during such leave. The amount of money is in the same ratio to the salary received during the leave as the unfulfilled term of the contract bears to the contracted three-year period.

5. Not more than three percent of the group may be granted a leave in any one year.

The Schenectady Plan[2]

1. Each person coming under our plan is allowed a maximum of 10 days sick leave on full pay each school year. This 10-day period is accumulative in whole or in part until a total of 100 days has been reached. At any time the person may use all or part of the days accumulated for personal illness on full pay. When 100 days or over have been accumulated the person may apply to the Board of Education for a half year's leave of absence on full pay, for travel or study or some other activity which, in the judgment of the Board of Education, shall be of equivalent value to the school system.

2. The maximum budget which the Board of Education will allow for these periods will be 1 percent of the total salary budget for such employees. The requests for leaves of absence are honored, in the order filed, as the budget permits. Any person must use his one-half year's leave of absence within one year after the date approved by the Board of Education.

3. The plan is retroactive as to the accumulation of 10-day periods for 10 years preceding February 1st, 1928.

4. For all absences not covered above full pay shall be deducted. The Board of Education may require a physician's certificate in cases of doubt.

Teacher Rating as a Means of Improvement

The question of teacher rating as a factor in the construction and administration of a salary schedule has been discussed in earlier sections of this bulletin.[3] Here we are concerned only with the use of devices for estimating teaching skill as means for the improvement of professional ability and morale.

Rating as an efficiency measure—Psychological investigation seems to confirm the general opinion that work is more effectively and easily done when the worker has a rather definite goal in view and a standard of judgment against which he may measure his achievements and shortcomings. In furnishing such standards teacher rating scales and score cards may be an important element in a program for the development of teachers. The chief danger in the use of such scales as are now available appears to reside in the tendency to assume for them a greater degree of accuracy and reliability than they actually possess. The accurate measurement of teaching ability is the Gordian knot of the new science of education. Many more years of careful work are required before the complex tangles of this problem will be fully understood. Those who most completely understand the limitations of the present crude measures of teaching skill are the most cautious in placing blind reliance on their accuracy.[4]

Meanwhile, schools must proceed and teachers should be encouraged to improve. While the inaccuracies of existing scales must be admitted, the use of some definite guide is a desirable element in the supervisory program. Any program of professional improvement necessarily begins with an estimate of the present ability, efficiency, limitations, needs, and interests of each teacher. Such an estimate may be made formally or informally; it may be written, oral, or merely implied; but an estimate of some kind there must be. Teacher rating devices are useful aids in making, recording, and checking these estimates.

Administration of a rating system—The principal steps in the successful administration of a system of rating teachers are:

1. Selection of a rating scale or score card appropriate to the needs of the particular community; or, if none of the available score cards are satisfactory, the construction of a new score card.

[1] Haisley, Otto W. "Sabbatical Leave Fundamentally Sound." *Michigan Educational Journal* 7: 218-19; December, 1929.
[2] Adapted from: Schenectady, New York, Department of Public Instruction. *Rules and Regulations of the Board of Education, 1928*. p. 32-33.
[3] See pages 40-41 and 44-46.
[4] See especially: American Educational Research Association. "Teacher Personnel." *Review of Educational Research* 1: 99-107; April, 1931. Washington, D. C.: the Association. Chapter VII, "Teacher Rating."

2. Appointment of certain persons to do the rating, or decision to use the scale merely as a self-rating device.

3. Enlisting the understanding and interest of the teaching staff in the enterprise.

4. The rating itself.

5. The use of the ratings as a basis for discussion leading toward the improvement of teaching.

In carrying out such a program, the following principles adapted from a report by a committee of the National Education Association will be helpful:

1. A rating plan must have as its main purpose the guiding of teachers into better service. For this reason, a rating plan should be inspirational and instructive.

2. Teacher rating systems should afford each person rated a definite basis for the improvement of his efficiency as a teacher.

3. The methods used in arriving at a rating of teaching efficiency should be as objective and scientific as educational progress permits and should be understood by all those rated.

4. A teacher should be fully informed in advance, upon beginning service in any school system, what will enter into the estimation of his work and how that estimation will be recorded.

5. Ratings should be automatically transmitted in written form to the teacher rated for his information and guidance.

6. There should be one official who is the final rating authority. Principals and supervisors may be advisory to this rating official.

7. A rating system should be a result of mutual agreement by administrative, supervisory, and classroom staff.[1]

Present practice in city school systems—Table 24 shows the number and percent of cities which give their teachers a definite periodical rating as to quality of service (such as A, B, C, D, E, or Excellent, Good, Fair, Poor). Of the 1,465 cities reporting, 46 percent now use some such rating scheme. This proportion varies according to the size of cities from 33 percent in the smallest population group to 76 percent among cities over 100,000 in population. Comparison of this table with Table 4[2] reveals that only 114 of the 668 cities which give ratings to teachers use these ratings in determining a teacher's place on the regular salary schedule. The tendency to use rating as a supervisory device rather than as a salary-schedule feature is clear.

Trend of practice in recent years—Comparison of the data in Table 24 with those obtained in 1928 indicates that the rating of teachers has gained very little in favor during the three-year period. For all cities reporting, the proportion which give teachers definite ratings increased from 44 percent to 46 percent. A small increase occurred in all except the smallest population group, where the percentage decreased slightly. The percentages for both 1931 and 1928, however, are somewhat lower than those reported in the 1923 survey. Of the 941 school systems answering this question in 1923, 57 percent were giving their teachers definite ratings, and of the 57 cities over 100,000 in population which reported in

[1] Riddle, Anna, chairman. "Report of the Committee of One Hundred on Classroom Teachers' Problems—Teacher Rating. *Proceedings, 1925*. Vol. 63. Washington, D. C.: National Education Association, 1925. p. 203-04.

[2] See page 40.

TABLE 24.—EXTENT OF TEACHER RATING IN 1930-31

Teachers definitely rated as to quality of service rendered	Cities over 100,000 in population		Cities 30,000 to 100,000 in population		Cities 10,000 to 30,000 in population		Cities 5,000 to 10,000 in population		Cities 2,500 to 5,000 in population		All cities reporting	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7	8	9	10	11	12	13
Yes	64[1]	76.2	115[2]	61.8	183[3]	46.4	178[4]	43.6	128[5]	32.6	668	45.6
No	20	23.8	71	38.2	211	53.6	230	56.4	265	67.4	797	54.4
Total	84	100.0	186	100.0	394	100.0	408	100.0	393	100.0	1465	100.0

Read table as follows: Of the 84 cities over 100,000 in population which reported, 64, or 76.2 percent definitely rate teachers as to quality of service rendered, while 20, or 23.8 percent indicated that teachers are not definitely rated. Similarly read figures for other population groups.

This tabulation is based on replies to question 11 of the inquiry blank reproduced on pages 72-75.

[1] Four of these cities reported that teachers are rated during first years of service.

[2] Five of these cities reported that teachers are rated during first years of service.

[3] One of these cities reported that teachers are rated during first years of service.

[4] One of these cities reported that only teachers not up to standard are rated.

[5] One of these reported "Yes, to a limited degree"; one reported "Yes, in some cases"; one reported "Yes, for elementary teachers"; and one reported "Yes, for first two years only."

that year, 82 percent were rating teachers. Whether these facts indicate a true decrease in the use of teacher rating since 1923 cannot be stated with certainty. The number of cities reporting in 1923 was much smaller than in 1928 and 1931, and possibly contained a larger proportion of the more progressive cities.[1]

Selected and Classified Bibliography

The following list of references has been carefully selected and classified under the principal topics discussed in the text of this bulletin. The items are limited to a few of the best and most recent books and magazine articles dealing with each subject. Each reference is briefly annotated to facilitate the use of the list. A number of other publications are referred to in footnotes to the text of the bulletin.

Teachers' Contracts and Term of Employment

1. ALLEN, IRA M. *The Teacher's Contractual Status as Revealed by an Analysis of American Court Decisions.* Contributions to Education, No. 304. New York: Bureau of Publications, Teachers College, Columbia University, 1928. 147 p.

   A study of the nature and characteristics of contractual relationships between public school teachers and boards of education.

2. ALMACK, J. C., and LANG, A. R., *Problems of the Teaching Profession.* Boston: Houghton Mifflin Co.; 1925. Chapter XII, "The Teacher's Tenure of Position," p. 215-34.

   A general consideration of the causes and consequences of brief and uncertain tenure. Discusses advantages and disadvantages of permanent tenure plans. Presents seven principles of tenure legislation.

3. ANDERSON, EARL W. *The Teacher's Contract and Other Legal Phases of Teacher Status.* Contributions to Education, No. 246. New York: Bureau of Publications, Teachers College, Columbia University, 1927. 180 p.

   An analysis of contract forms, local regulations, state laws, and court decisions to discover the legal status of the teacher. Tenure provisions in contracts, tenure legislation, and the optimum status of the teacher with respect to tenure and dismissal are discussed on pages 49, 128-29, and 138-41.

4. BUTSCH, RUSSELL L. C. "Teacher Tenure." *Review of Educational Research* 1:118-21; April, 1931. Washington, D. C.: American Educational Research Association, National Education Association.

   Reviews studies of teacher turnover with respect to its extent, causes, and the influence of tenure legislation.

5. CUBBERLEY, ELLWOOD P. *State School Administration.* Boston: Houghton Mifflin Co., 1927. "Appointment and Tenure," p. 642-51.

   Describes conditions in American school systems responsible for the annual-election plan of employing teachers. Gives arguments for and against life tenure, and advocates probationary employment followed by indefinite tenure. Outlines a sound state plan of teacher tenure.

6. LEWIS, E. E. *Personnel Problems of the Teaching Staff.* New York: Century Co., 1925. Chapter XVI, "Significance of Turnover," p. 328-41; and Chapter XVII, "How To Increase Tenure," p. 342-62.

   Defines turnover in terms of replacements and discusses its causes. Lists arguments for and against long tenure, and sets up principles for the formulation of state laws and local regulations.

7. NATIONAL EDUCATION ASSOCIATION, RESEARCH DIVISION. "A Self-survey Plan for State School Systems; Part I: Checklists; Part II: Handbook." *Research Bulletin* 8:67, 81-82, March, 1930; and 120-24, May, 1930. Washington, D. C.: the Association.

   Sets up ten criteria for judging state legislation and administration with respect to teachers' employment and contracts. Applies the checklist to Pennsylvania for illustration.

8. PETERSON, A. G. "Turnover of Rural Teachers." *Educational Administration and Supervision* 16: 659-67; December, 1930.

   A summary of conditions and factors relating to the tenure of rural teachers in various sections of the United States during the past decade.

9. ROWLAND, ALBERT L., chairman. "Report of the Committee of One Hundred on Tenure Problems." *Proceedings, 1930,* Vol. 68. Washington, D. C.: National Education Association, 1930. p. 195-97.

   Presents twelve principles underlying the formulation and operation of wise tenure legislation. Reviews recent legislation and reports studies in progress on the problem.

10. ROWLAND, ALBERT L., chairman. "Report of the Committee of One Hundred on Tenure Problems." *Proceedings, 1931.* Vol. 69. Washington, D. C.: National Education Association, 1931. p. 264-70.

    Summarizes the results of a study by Holmstedt concerning the effects of the New Jersey teacher tenure law. Conditions in New Jersey

[1] See footnote on page 41 for explanation of the assumptions and methods used in comparing data for the different years.

are compared with those in Connecticut, a state having no tenure law for teachers.

Teachers' Salaries and Salary Scheduling

NOTE: In addition to the references listed here, see "Sources of Information on Salaries and Salary Scheduling" on pages 48-51 of this bulletin.

Salary Scheduling as a Principle

11. ELSBREE, WILLARD S. *Teachers' Salaries.* New York: Bureau of Publications, Teachers College, Columbia University, 1931. 286 p.

Chapter I describes the development and advantages of salary scheduling.

12. LEWIS, E. E. *Personnel Problems of the Teaching Staff.* New York: Century Co., 1925. 460 p.

Pages 279 and following, list and summarize nine advantages of a proper salary schedule over individual bargaining.

13. NATIONAL EDUCATION ASSOCIATION, RESEARCH DIVISION. "The Scheduling of Teachers' Salaries." *Research Bulletin* 5:130-92; May, 1927. Washington, D. C.: the Association.

Points out advantages and difficulties in the salary-scheduling idea.

Factors Determining the Teacher's Place on the Regular Schedule

14. CLARK, RIDGLEY C. "Principles of Advancing the Salaries of Teachers," and "Principles Underlying the Maximum Salary." *American School Board Journal* 80:41-42, March, 1930; 50, 142, April, 1930; 47-48, May, 1930.

A general discussion centering around the various bases used for determining teachers' salary increments.

15. DEFFENBAUGH, W. S. *Recent Movements in City School Systems.* U. S. Department of the Interior, Bureau of Education, Bulletin, 1927, No. 8. Washington, D. C.: Government Printing Office, 1927. 26 p.

States that the defense of some boards for establishing a salary schedule in favor of men teachers is the law of supply and demand. Contends that equal salaries should be paid if possible, but that if capable men are to be held in the profession their salaries must not be lowered to equal those now paid women.

16. ELSBREE, WILLARD S. *Teachers' Salaries.* New York: Bureau of Publications, Teachers College, Columbia University, 1931. 286 p.

Chapters III, IV, and V give an extended treatment of the use of merit ratings, position held, preparation, experience, and sex as factors in fixing salaries.

17. ENGELHARDT, FRED. "Changing Practices in the Administration of the Teaching Personnel." *The Changing Educational World, 1905-1930* (A. C. Eurich, editor). Minneapolis: University of Minnesota Press, 1931. p. 162-73.

A critical discussion of some of the practical difficulties involved in the single salary schedule plan.

18. ENGELHARDT, FRED. *Public School Organization and Administration.* Boston: Ginn and Co., 1931. p. 198-217.

Discusses the importance of sound policies of compensation, the movement to establish satisfactory salary schedules, the principles of scheduling, teacher supply and demand in relation to salaries, costs and standards of living, the single salary schedule, and the recognition of merit in administering schedules.

19. MCGAUGHY, JAMES R. "The Movement Toward Scientific Salary Schedules." *Teachers College Record* 30:752-59; May, 1929.

Analysis and comparison of three city salary surveys: New York, Pittsburgh, and San Francisco. Attacks state laws making equal pay for men and women mandatory.

20. MEEKER, ROYAL. *A Study of Costs and Standards of Living of Minneapolis Teachers in Relation to Their Salaries.* Minneapolis: Central Committee of Teachers' Associations, 1926. 39 p.

Presents data on number of dependents of single and married men and women teachers in Minneapolis.

21. MOEHLMAN, ARTHUR B. *Public School Finance.* Chicago: Rand McNally & Co., 1927. 508 p.

Chapter IX describes the nature and effects of four types of salary schedule: position-automatic, preparation-automatic or single, position-merit, and preparation-merit.

22. MORRIS, LYLE L. *The Single Salary Schedule.* Contributions to Education, No. 413. New York: Bureau of Publications, Teachers College, Columbia University, 1930. 79 p.

A discussion of principles and current practices. Urges that single salary schedules give more recognition to the kind and value of training than to the amount of training.

23. NATIONAL EDUCATION ASSOCIATION, RESEARCH DIVISION. "The Scheduling of Teachers' Salaries." *Research Bulletin* 5:130-92; May, 1927. Washington, D. C.: the Association.

A general discussion of theory and practice.

24. REEDER, WARD G. *The Fundamentals of Public School Administration.* New York: Macmillan Co., 1930. Chapter VI, "Pay of Teachers," p. 114-36.

A good discussion of many factors involved in the sound administration of teachers' salaries. Deals with criteria for determining the adequacy of salaries, advantages of a salary schedule, principles of scheduling, the single salary schedule, salary campaigns, and payroll procedures.

Supermaximum Salaries

25. BALLOU, FRANK W. "Determining Who Are Superior Teachers." *Elementary School Journal* 28:256-62; December, 1927.

Presents schedule of supermaximum salaries paid in Washington, D. C., with description of system for selecting candidates for promotion to this schedule.

26. CLARK, RIDGLEY C. "Principles Underlying the Maximum Salary." *American School Board Journal* 80:47-48; May, 1930.

Recommends a supermaximum for superior training or performance.

27. ELSBREE, WILLARD S. *Teachers' Salaries.* New York: Bureau of Publications, Teachers College, Columbia University, 1931. 286 p.

Considers the formulation of supermaxima as part of one of the seven general steps in formulating a salary schedule.

Special Bonuses

28. BOYNTON, F. D. "Improving Teachers in Service." *Journal of Education* 106:352-3; October 17, 1927.

Declares that plans for the improvement of teachers in service should provide both opportunity and reward. Favors salary increases rather than the special bonus.

29. ELSBREE, WILLARD S. *Teachers' Salaries.* New York: Bureau of Publications, Teachers College, Columbia University, 1931. 286 p.

Bonuses are defined and described, p. 113; arguments for and against are given, p. 64-6.

30. LEWIS, E. E. *Personnel Problems of the Teaching Staff.* New York: Century Co., 1925. p. 72-81.

Gives a number of school-board regulations relative to the granting of financial rewards in recognition of study and travel for professional improvement.

31. "Symposium on Professional Study: Should Teachers Receive a Bonus for It?" *Journal of Education* 111:91-92, January 27, 1930; 119-120, February 3, 1930; 147-49, February 10, 1930.

An exchange of views among a group of five superintendents of schools, an assistant superintendent, a teacher, and two college experts.

Sick Leave and Related Problems

32. ALMACK, J. C., and LANG, A. R. *Problems of the Teaching Profession.* Boston: Houghton Mifflin Co., 1925. Chapter XV, "The Health of the Teacher," p. 273-93.

Emphasizes the importance of conserving the teacher's health; makes suggestions as a guide to administrative officials and to teachers themselves looking toward the physical well-being of teachers.

33. ANDERSON, EARL W. "Health of the Teacher." *Review of Educational Research* 1:111-14; April, 1931. Washington, D. C.: American Educational Research Association, National Education Association.

Reviews most of the important research studies in this field.

34. CARROTHERS, GEORGE E. *The Physical Efficiency of Teachers.* Contributions to Education, No. 155. New York: Bureau of Publications, Teachers College, Columbia University, 1924. Chapter IV, "The Operation of Board Regulations," p. 61-76.

Presents data secured from a study of absenteeism among teachers in the Denver, Cleveland, and Springfield, Massachusetts, schools. Compares sick-leave provisions in relation to the number of teacher absences in the three cities. Concludes that of all sick-leave plans, the cumulative is the best if a definite number of days of paid sick leave must be written into school board rules.

35. CLARK, RIDGLEY C. "When the Teacher Is Sick." *American School Board Journal* 80:68, 70; June, 1930.

Describes practices in allowing sick leave in various communities in Connecticut; mentions administrative measures designed to promote the physical welfare of teachers.

36. LEWIS, E. E. *Personnel Problems of the Teaching Staff.* New York: Century Co., 1925. Chapter XX, "The Teacher's Health, Recreation and Leisure," p. 399-412.

Urges that teachers be living examples of good health, maintaining a high level of vitality. States that much of the ill health of teachers is preventable; emphasizes importance of physical examinations, sick leave, and a planned recreational program.

37. NATIONAL EDUCATION ASSOCIATION, DEPARTMENT OF CLASSROOM TEACHERS. "The Economic Welfare of Teachers." *Sixth Yearbook.* Washington, D. C.: the Association, 1931. 244 p.

Chapter IV deals with commercial insurance as a means of protecting teachers against loss of earning power. Discusses especially group insurance and describes group plans in operation among local teachers' organizations. Chapter V presents information on teachers' mutual benefit plans, and Chapter VI summarizes available information concerning teachers' retirement and pension systems.

38. NATIONAL EDUCATION ASSOCIATION, RESEARCH DIVISION. "Practices Affecting Teacher Personnel." *Research Bulletin* 6:205-56; September, 1928. Washington, D. C.: the Association. "The Sick Leave Problem," p. 233-37.

Reports practice in granting sick leave in 1,532 cities reporting in 1928.

39. REEDER, WARD G. *The Fundamentals of Public School Administration.* New York: Macmillan Co., 1930. Chapter VII, "Administration of Substitute-Teacher Service," p. 137-50.

Discusses the importance of substitute service, presents data as to its present status in school systems, and outlines a procedure for securing efficient substitute service. Also describes various methods of protecting absent teachers from loss of income.

40. ROGERS, JAMES FREDERICK. *The Health of the Teacher.* U. S. Department of the Interior, Bureau of Education, School Health Studies, No. 12. Washington, D. C.: Government Printing Office, 1926. p. 2-17.

Summarizes data from several studies on practice of cities in granting sick leave to teachers. Finds no relation indicated between allowed

length of leave and amount of absenteeism. Declares that cities are wise in granting sick leave with pay for at least ten days a year. Quotes by-laws of departments of education relative to the granting of sick leave in six large cities.

41. ROGERS, JAMES FREDERICK. "Wide Variation of Practice in Matter of Sick Leave." *School Life* 13:28-29; October, 1927.

Gives data on sick leave for teachers in cities reporting to U. S. Bureau of Education, and lays down a few principles, relating to the health of the teacher, which should govern in the administering of sick-leave system. States that a cumulative plan is "the next best thing" to allowing as many days as are needed and deciding each case on its individual merits.

42. "Safeguarding the Teacher's Health." (A symposium) *Nation's Schools* 3:50-56; January, 1929.

Tells of the progress made in various communities in protecting the health of teachers. Describes programs in 23 cities.

43. "Sick Leave Allowances for Teachers." (Editorial) *American School Board Journal* 78: 69; May, 1929.

Quotes seven conclusions on sick-leave practices developed by I. M. Allen, Superintendent of Schools in Highland Park, Michigan. Editorial states that public interest, based upon the interests of the children, should be the guiding principle upon which school boards should base their sick-leave policies and regulations.

44. TERMAN, LEWIS M., AND ALMACK, JOHN C. *The Hygiene of the School Child.* Boston: Houghton Mifflin Co., 1929. Chapter XXII, "The Teacher's Health," p. 437-71.

Reviews studies made in Europe and the United States; offers a suggested program for improving and safeguarding the teacher's health.

45. U. S. DEPARTMENT OF THE INTERIOR, BUREAU OF EDUCATION. *Pay Status of Absent Teachers and Pay of Substitute Teachers.* City School Leaflet No. 21, April, 1926. Washington, D. C.: Government Printing Office, 1926. 14 p.

Gives provisions of school systems in 163 cities of 30,000 or more population as to: the number of days teachers are granted leave for sickness; the pay of teachers during leave for sickness; and the rate of pay for substitute teachers.

46. WOOD, THOMAS D., chairman. *The Teacher's Health: What Some Communities Are Doing To Conserve It.* Monograph No. 4, School Health Bureau, Welfare Division. New York: Metropolitan Life Insurance Co., about 1928. 32 p.

Includes results of a questionnaire answered by 48 school systems; makes detailed recommendations for a school board policy to promote good health among teachers; reproduces forms used in Philadelphia in making periodic health examination of school employees.

Extended Leaves of Absence for Professional Improvement

47. BRICKHOUSE, LUCY N. "Leaves of Absence for Study and Travel." *Fourth Yearbook.* Washington, D. C.: Department of Classroom Teachers, National Education Association, 1929. p. 139-41.

Lists cities granting leave of absence for professional improvement on half salary, or full salary less pay of substitute. Reports that less than eight percent of the school systems give financial encouragement for travel.

48. LEWIS, E. E. *Personnel Problems of the Teaching Staff.* New York: Century Co., 1925. 460 p.

Chapter V contains a brief summary of practices in granting sabbatical leave to teachers in seven cities. Gives two plans in some detail.

49. MACCAUGHEY, V. "Sabbatical Leave for Teachers." *Journal of the National Education Association* 15:18; January, 1926.

Reviews outstanding points in report on sabbatical leave for teachers to the California Council of Education. Lists cities which have plan in some form.

50. MCGLADE, JOHN C. "Leave-of-Absence for Study." *Sierra Educational News* 24: 9-10; January, 1928.

Summarizes data from two studies of practice in American cities. Benefits to teachers, school system, and community are discussed.

51. MORGAN, KATHERINE M. "Report of the Committee on Sabbatical Year." *Proceedings, 1925.* Vol. 63. Washington, D. C.: National Education Association, 1925. p. 369-72.

Report of a committee of the Teachers' Cooperative Council, Kansas City. Lists typical cities granting leave, and surveys variations in practice. Concludes that sabbatical leave is fast becoming a recognized means of securing for the community the benefits of teacher improvement.

52. NATIONAL EDUCATION ASSOCIATION, RESEARCH DIVISION. "Practices Affecting Teacher Personnel." *Research Bulletin* 6: 205-256; September, 1928. Washington, D. C.; the Association, p. 225-27.

A survey of conditions in 1928.

53. NATIONAL EDUCATION ASSOCIATION, RESEARCH DIVISION. *Sabbatical Leave for Public School Teachers.* Washington, D. C.: the Association, July, 1927. 31 p.

A study directed by the Representative Assembly of the Association. Brings together data on systems for sabbatical leave in thirty cities. Discusses purpose and value of sabbatical leave and essential elements of plans for granting leave to teachers and characteristics of existing plans. Includes tabular analysis and an extensive bibliography.

54. "A Practical Plan for Sabbatical Leave." *National League of Teachers' Associations Yearbook, 1926.* Minneapolis: the Association, 1926. p. 40-43.

States that plans of sabbatical leave have met with general approval, and that the expense is

small. Gives some of most widely accepted regulations governing sabbatical leave. Names benefits accruing to teachers and to school systems.

55. "Sabbatical Leaves for Teachers." *Elementary School Journal* 27: 321-23; January, 1927.

Abstracts from an article in 1926 *Yearbook* of the National League of Teachers' Associations. Lists eleven regulations generally applicable to sabbatical leave plans. Describes plans in Rochester, Richmond, and New York.

56. SKINNER, VERNE P. "Sabbatical Leave for Teachers." *Fourth Yearbook*. Washington, D. C.: Department of Classroom Teachers, National Education Association, 1929. p. 135-39.

Reports that about sixty-five cities provided some form of sabbatical leave, fifty percent of these paying half salary or more. Leave may be granted for professional improvement only, for travel and study, or for rest and restoration of health.

Teacher Rating

57. ALMACK, J. C., AND LANG, A. R. *Problems of the Teaching Profession*. Boston: Houghton Mifflin Co., 1925. p. 175-94.

Discusses objections to the rating of teachers and the use of various devices of measurement. Names six purposes for which rating schemes are used. Maintains that chief value of rating lies in professional improvement.

58. BRUECKNER, L. J. "Scales for the Rating of Teaching Skill." *University of Minnesota Bulletin*. Vol. 30, No. 12. Minneapolis, Minnesota: College of Education, University of Minnesota, February 18, 1927. 28 p.

Names three functions of teacher rating. Points out difficulties in the use of existing scales and seeks to develop a more objective plan. This plan provides for rating of teachers according to teaching methods used.

59. BUTSCH, RUSSELL L. C. "Teacher Rating." *Review of Educational Research* 1: 99-107; April, 1931. Washington, D. C.: American Educational Research Association, National Education Association.

A summary of the scientific research on teacher rating up to November, 1930. Extensive bibliography.

60. CHARTERS, W. W., AND WAPLES, DOUGLAS. *The Commonwealth Teacher-Training Study*. Chicago: University of Chicago Press, 1929. p. 14-19.

Presents an extensive list of traits of successful teaching arranged in order of estimated importance.

61. CRABBS, LELAH MAE. *Measuring Efficiency in Supervision and Teaching*. Contributions to Education, No. 175. New York: Bureau of Publications, Teachers College, Columbia University, 1925. 98 p.

Describes a program of supervision based on measurement and attempts the evaluation of such a program. Describes results of applying a teaching efficiency formula to urban and rural teachers.

62. LEWIS, E. E. *Personnel Problems of the Teaching Staff*. New York: Century Co., 1925. p. 190-213.

Briefly describes the theory of teacher rating, presents evidence concerning its reliability, and mentions a number of score cards.

63. RIDDLE, ANNA, chairman. "Report of the Committee of One Hundred on Classroom Teachers' Problems—Teacher Rating." *Proceedings, 1925*. Vol. 63. Washington, D. C.: National Education Association, 1925. p. 200-15.

A summary of the teacher rating situation in American schools. Arguments for and against rating are compared and fundamental principles are presented.

64. WHITNEY, FREDERICK L. *The Growth of Teachers in Service*. New York: Century Co., 1927. p. 42-55, 143-53, 206-12.

Discusses methods of teacher rating. Suggests activity analysis and the "trade-test" forms as being most helpful. States that a number of school systems have abandoned schemes for basing salaries on merit as measured by rating devices. Summarizes details of reports on teacher-rating plans in thirty-one small school systems.

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Questionnaire Used in Collection of Data

THE NATIONAL EDUCATION ASSOCIATION
OF THE UNITED STATES
1201 SIXTEENTH STREET
WASHINGTON, D. C.

June, 1931

ADMINISTRATIVE PRACTICES AFFECTING CLASSROOM TEACHERS

Professional Qualifications of Teachers

1. *Educational requirements.*—Check below the number of years of training *beyond high school graduation* required for initial appointment as teacher in your city:

Required Number of Years' Training Beyond High School	Elementary School Teachers	Junior High School Teachers	Senior High School Teachers
One year			
Two years			
Three years			
Four years			
Five years			

2. *Experience requirements.*—Check below the number of years of previous teaching experience required for initial appointment as teacher in your city:

Number of Years' Experience Required	Elementary School Teachers	Junior High School Teachers	Senior High School Teachers
No experience required			
One year			
Two years			
More than two years			

Personal Factors Related to Appointment

3. (a) *Local teachers.*—Does your policy give preference to the appointment of local residents as teachers? Yes..... No.....

(b) Please state briefly your practice with regard to the employment of local residents as teachers:.....

.....

.....

4. (a) *Married women as teachers.*—Has your board of education a rule or policy against the appointment of *new* teachers who are married women? Yes..... No.....

(b) Does your school board require women teachers who marry to give up their positions at once? Yes..... No..... At the end of the school year? Yes..... No.....

Questionnaire (Cont.)

Appointment and Contractual Status

5. *Selection of teachers.*—Check any of the following practices which you follow consistently in the selection of teachers:
   (a) Definite search for desirable prospects: (1) In other systems. Yes..... No..... (2) In teacher-training institutions. Yes..... No.....
   (b) Use of formal application blank. Yes..... No.....
   (c) Collection of letters from persons given as references. Yes..... No.....
   (d) Personal interview with applicant. Yes..... No.....
   (e) Written examinations. Yes..... No.....
   (f) Physical examination. Yes..... No.....
   (g) Observation of classroom work of applicant. Yes..... No.....
   (h) Other practices (please describe): .....
   .....

6. *Term of employment.*—What method of employment is followed? (Please indicate below.)

Method of Employment	For newly-elected teachers	For teachers with several years' experience in your system
(a) Annual election		
(b) Election for term of more than one year (state length of term in years)		
(c) Election for an indefinite period subject to termination at any time		
(d) Election for permanent service		
(e) Other plan (please describe)		

7. *Contracts.*—Are teachers required to sign a contract? Yes..... No.....
8. *Basis for paying teachers' salaries.*—Over how many months does the payment of a teacher's annual salary extend? (a) Nine months..... (b) Ten months..... (c) Eleven months..... (d) Twelve months.....
9. How often are payments of teachers' salaries made? (a) Monthly..... (b) Semi-monthly..... (c) Other plan (please describe).....
   .....
10. *Promotional examinations.*—Does your school system conduct written examinations in connection with promoting teachers within the service? Yes..... No.....
11. *Ratings.*—Are all teachers given a definite rating (e.g., A, B, C, D, E, or Excellent, Good, Fair, Poor) periodically as to quality of service rendered? Yes..... No.....

Salary Schedule Features

12. *Salary schedule.*—Has your city a definite schedule for teachers' salaries? Yes..... No.....
13. If a salary schedule has been adopted, check below the factors which automatically determine a classroom teacher's place on the schedule:
   (a) Number of years of service. Yes..... No.....
   (b) Amount of professional training. Yes..... No.....
   (c) Ratings on efficiency scale. Yes..... No.....
   (d) Position held[1] (e.g., elementary, high school, etc.). Yes..... No.....
   (e) Other factors (please describe).....
   .....

[1] Remember that this blank applies only to classroom teachers.

Questionnaire (Cont.)

14. *Salaries of men teachers.*—Are men teachers paid higher salaries than women of equal training and experience: (a) In elementary schools? Yes..... No..... (b) In junior high schools? Yes..... No..... (c) In senior high schools? Yes..... No.....

15. *Supermaximum salaries.*—Above the regular maximum of your salary schedule do you have a supermaximum to which regular teachers with special qualifications may be promoted? Yes..... No.....

16. If a supermaximum salary is provided, please check below the bases upon which a teacher's promotion from the regular maximum to the supermaximum is dependent:

    (a) Additional training. Yes..... No.....

    (b) Superior rating and performance. Yes..... No.....

    (c) Extra duties. Yes..... No.....

    (d) Length of service. Yes..... No.....

    (e) Written examination. Yes..... No.....

    (f) Other bases (please describe).....

    .....

17. Indicate below the statement which describes the general situation as it affects teachers' salaries in your city in 1931-32:

    (a) The regular salary schedule will be followed as usual, with teachers receiving the customary annual increments.

    .....

    (b) The 1930-31 salary schedule is to be replaced by a new schedule which provides larger salaries for 1931-32.....

    .....

    (c) The regular salary increments will be withheld: i.e., teachers will receive the same salaries in 1931-32 that they are now receiving.....

    (d) Other situation (please describe).....

    .....

Summer School and Travel

18. (a) Is a bonus (apart from the regular salary schedule) granted to teachers for attending summer school Yes..... No.....

    (b) What is the amount of such bonus?.....

    (c) For how many consecutive years may it be granted?.....

19. (a) Do you make any direct financial reward for educative travel? Yes..... No.....

    (b) What is the amount of such reward?.....

Sabbatical Leave

20. Do you grant extended[1] leaves of absence to teachers: (a) For professional improvement? Yes..... No..... (b) For travel? Yes..... No..... (c) For rest? Yes..... No..... (d) For any other purpose?.....

    .....

21. What part of the regular salary is paid to teachers taking leave for professional improvement? (Check below.)

    (a) No salary.....

    (b) Full salary.....

    (c) Half salary.....

    (d) Full salary, less pay of substitute.....

[1] Not including sick leaves. See Question 23.

Questionnaire (Cont.)

(e) Other plan (please describe).....

.....

22. How many teachers in 1930-31 took extended[1] leaves of absence for professional improvement, with some part of salary paid?.....

Sick Leave and Absence of Teachers

23. Is sick leave with some salary granted to teachers? Yes..... No.....

24. If sick leave with some salary is granted:

(a) Please indicate, after the fraction of salary allowed, the number of days of sick leave allowed each year:

Fraction of Salary Allowed	Number of Days of Sick Leave Allowed Each Year
(1) Full salary.....	.....
(2) Half salary.....	.....
(3) Full salary, less pay of substitute.....	.....
(4) Other fraction of salary.....	.....

(b) Is the allowance cumulative; that is, may the days not used during one year be added to those of later years? Yes..... No.....

(c) If so, what is the maximum number of days of sick leave which may accumulate?.....

(d) Is a doctor's certificate required to receive salary for days absent on account of sickness? Yes..... No.....

25. For what reasons other than personal illness, and for how many days, do you permit teachers to be absent with some salary? (Indicate below.)

Reason for Absence	Number of Days Allowed with Full Pay	Number of Days with Part Pay Only
(a) Death in immediate family.....	.....	.....
(b) Visiting other schools.....	.....	.....
(c) Attending educational meetings.....	.....	.....
(d) Religious holidays.....	.....	.....
(e) Other reasons:.....		
.....		

26. *Payment of substitute teachers.*—Please check below your method of paying substitute teachers:

(a) Flat rate per day.....

(b) Percent of regular teachers' salary.....

(c) Monthly salary, on full-time basis.....

(d) Other plan (please describe).....

Name of person reporting.....

Official position.....

City.....State.....

Return one copy only, to: Research Division, National Education Association, 1201 Sixteenth Street, Washington, D. C.

Please inclose a copy of any printed or mimeographed rules of your school system dealing with any of the above topics.

[1] Not including sick leaves. See Question 23.

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FOREWORD

ESTIMATES of school efficiency will be made as long as people are sufficiently interested in education to establish and maintain schools. The citizens of each of the forty-eight states in the Union want to know how the state school system which they support compares with those of the other states. Educators are eager to compare the effects of different plans of organization and methods of teaching. Such comparison is not only inevitable but also desirable. A standard of judgment and a critical attitude are necessary to progress. Naturally, therefore, there has been a general and insistent demand that the National Education Association publish useful materials on this topic.

While the development of a perfectly satisfactory scale for rating school efficiency is still a task for the future, every honest attempt to evaluate the achievement of school systems is a step toward its final solution. This Bulletin brings together and evaluates the more important attempts to estimate the efficiency of school systems. This is an important contribution since the investigations on this topic have previously been widely scattered and inaccessible to the general student of the problem. In addition to the resumé of past studies, a plan for making a self-survey of state school systems is presented and comparative data are submitted with respect to the present standing of the states on five important factors related to school efficiency.

This Bulletin does not advance a final or complete solution to the problem of estimating state school efficiency. No such solution is possible in the present state of our knowledge of what makes schools efficient and in the face of the incompleteness of comparable educational statistics. Nevertheless, the technics described and the facts presented should make this Bulletin indispensable to state departments of education, state and local education associations, local school administrators, and civic groups interested in the progress of their school systems.

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

Introduction

What is Efficiency?

The mechanical engineer defines *efficiency* as the ratio of useful work produced to the energy expended in producing it. The efficiency of a steam engine, for instance, is computed by dividing the energy delivered at the driving wheel by the energy consumed in the burning of the fuel. Such a concept has no concern with the absolute amount of work done by the engine or the absolute amount of fuel used. The mechanical concept of efficiency is a matter of relationships—of output to input, of effort to results.[1]

In the application of scientific methods to education and other types of social engineering, the term *efficiency* has been borrowed from the mechanical field. However, the concept of efficiency used by the mechanical engineer is not well-suited to the field of education. Even tho the educational results accomplished are not in direct proportion to the effort expended, it may be socially desirable to put forth a large additional effort in order to achieve a relatively small additional gain. A school that costs $2,000 a year might not be as much as four times as educative as a school that costs only $500 a year. Nevertheless, the former would almost certainly be more effective and achieve results which would be superior enough to justify abundantly the additional expenditure. In estimating the efficiency of a social institution, such as the school, human values, satisfactions, and benefits are basic considerations. The costs, both in money and in effort, cannot be ignored, but the mere ratio of costs to results cannot be accepted as a complete and satisfactory measure of school efficiency.

If the school system makes a contribution to social welfare and individual happiness, it is an efficient social institution. The greater this contribution, the greater is its efficiency.

State school efficiency as used in this Bulletin refers to the amount and quality of educational services rendered. *Educational service* is narrowly construed to mean, primarily, the work of organized schools below the collegiate level. No special attention is given to higher education as such, to the program of adult education, or to auxiliary educational agencies such as libraries and museums.

The several states face educational problems of varying difficulty. Some are relatively wealthy; some have a relatively low per capita income and wealth. Some have many children in proportion to their total population; others have a low ratio of children to adults. Some have a population largely concentrated in cities; others are predominantly rural. Some have a relatively homogenous school population; others have wide racial, social, or economic differences among their school children. These and other factors make it relatively easy or relatively difficult for a given state to provide satisfactory educational opportunities. However, in general, these differences in ability are left out of consideration in this Bulletin.[2] These factors should always be considered in interpreting any survey of school efficiency, but they are not within the scope of this study. Here the discussion centers around methods for estimating state school achievement, without reference to the relative ease or difficulty of making that achievement.

How is State School Efficiency Measured?

The application of objective methods to education has led to the development of a number of devices and technics for measuring state school efficiency. These have been used in connection with three general methods of studying this problem; namely, (1) the state-wide survey, (2) standard tests and measurements, and (3) statistical analysis.

The survey method employs a variety of technics in order to collect a wide range of facts pertaining to a school system. These facts are then organized and interpreted by experts in charge of the survey. With these data as a basis, estimates are made of the effectiveness of the school system. The chief characteristic of the survey method is its reliance on the considered judgment of professional educators who

[1] Slichter, S. H. "Efficiency." *Encyclopaedia of the Social Sciences* 5: 437-39.
[2] National Education Association, Research Division. "The Ability of the States to Support Education." *Research Bulletin* 4: 1-88· January and March, 1926. Washington, D. C.: the Association.

have attained expertness through breadth of knowledge, wide experience, and scientific research.

Objective educational tests attempt to measure directly the relative achievement of a school system in terms of the amount learned by the children in the regular school subjects.

Statistical analysis, the third method of estimating school efficiency, undertakes to discover objective data regarding the functioning of a school system by studying certain factors believed to be closely related to school efficiency; as, school expenditures, the number of children enroled, teachers' salaries, literacy, and similar factors.

These three methods are not always distinct and the first, the survey, frequently makes incidental use of both standard tests and statistical analysis.

Purpose and Scope of this Study

This Bulletin presents, first, a review of all of the more important attempts to estimate state school efficiency by the three methods described above.

In addition to this review of past studies a self-survey plan for evaluating the effectiveness of state school systems is presented together with illustrations of its application to a number of states. With this plan as a basis for their work, educators and laymen are encouraged and assisted to make a continuous survey of their own school system.

Finally, this Bulletin submits recent comparative data on several factors generally conceded to be essential to the effective functioning of state school systems. The data are organized in such a way as to give each state its respective rank with regard to each of the factors.

> No community should rest contented with being superior to other communities, while it is inferior to its own capabilities.—*Horace Mann on Means and Objects of Common-School Education.*

The State School Survey

The school survey has been defined as "a scientific inquiry which obtains facts about the present efficiency of a school system, and on the basis of these facts offers constructive proposals for desirable improvements."[1] This definition includes the essential features of state-wide surveys, although such investigations may differ widely with respect to organization, methods employed, and types of problems attacked.

The conscious use of the modern survey method as a means of systematically collecting facts relating to a school system began about 1911 with city school surveys. The practical usefulness of the method immediately recommended it to school officials with the result that, in a short time, its use was extended to all types of school units, from a single school, as a normal school or university, to a whole school system as large as that of a state.

The survey method has the advantage of not being limited to any one procedure in its investigations. It has at its disposal any or all existing research technics. Not only has the survey availed itself of methods and technics already at hand, but it has devised many of its own and improved others in the effort to solve particular problems. Thus, the survey has made valuable contributions to research procedures. School surveys have developed scales for evaluating teaching efficiency, score cards for rating the school plant and tests for measuring educational achievement.

An important outcome of the survey movement has been the development of a critical attitude toward school efficiency. Surveys by outside agencies are often followed by self-surveys conducted by educators and laymen within the system. A plan of self-analysis affords opportunity to understand the points of strength and weakness in the schools. The chief objective of such a plan is the improvement of a school system from within and not comparison among school units.

Characteristics of State School Surveys

In order to discover the nature and characteristics of the state school survey as a means of estimating efficiency, the reports of thirty-five general state school surveys were studied. The purposes of the survey, the scope of the report, the research methods employed, and the organization and administration of the survey staff itself were noted in each case.[2] Findings from this analysis follow.

Purpose and scope of state school surveys—A state school survey may be confined to some particular phase of education or it may involve an investigation of the entire school system. Quotations from a few surveys reveal a wide range of objectives:

Washington. The school system of the state was studied with a view to the "revision and readjustment to existing conditions" of the common school laws.[3]

Kansas. The State School Code Commission was appointed "for the purpose of clarifying, revising, and codifying the school laws of the state."[4]

Indiana. As its name indicates, the Indiana Rural Education Survey Committee confined its efforts to an investigation of the problems of rural education; and this scope was narrowed still further to include only problems relating to teachers, administration, and finance.[5]

Mississippi. In 1927 the Bernard B. Jones Fund conducted an "investigation of the intellectual status and educational progress of pupils in the elementary and high schools and freshmen in the colleges, public and private."[6]

In contrast to the relatively narrow scope covered by the above surveys are the following widely inclusive studies:

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[1] Sears, Jesse B. *The School Survey*. Boston: Houghton Mifflin Co., 1925. p. xi-xii of Preface.

[2] For the list of surveys consulted, see p. 94 of this Bulletin. Copies of the work-sheets used in analyzing the surveys may be obtained by addressing the Research Division.

[3] Public School Administrative Code Commission of the State of Washington. *Report* delivered to the Governor and the Legislature, January 11, 1921. Olympia, Washington. p. 3.

[4] State School Code Commission of Kansas. *Report*. Topeka, Kan.: State School Code Commission, 1929. Vol. 1, p. 3.

[5] Indiana Rural Education Survey Committee. *Report*. Indianapolis, Ind.: State Superintendent of Schools, State House, March, 1926. 130 p.

[6] O'Shea, M. V. *A State Educational System at Work*. (Mississippi). Hattiesburg, Miss.: Bernard B. Jones Fund (F. S. Harmon, Treas., Box 477), 1927. Title page.

Alabama. The survey investigated "all schools and educational institutions supported in whole or in part from public funds, to determine the efficiency of the same and to report its findings with recommendations for increased efficiency and economy."[1]

Florida. It was the object of the survey "to make a complete and thoroughgoing survey of the public school system."[2]

Delaware. The survey included "the public schools for both white and colored children in the state, to study the administration of the said schools, to consider the appropriations made therefor, to investigate the use of funds so appropriated, to harmonize, unify and revise the school laws, to develop an educational system suited to the conditions existing in the state."[3]

Indiana. The survey of 1923 investigated the "entire educational system of the state with a view to standardizing, unifying and correlating the various policies and agencies of such system in order that they may be in harmony with the educational requirements of the state."[4]

Survey research procedures — The survey method is seldom a single, clearcut research procedure, but rather a collection of procedures. The method used in any particular case is determined largely by the nature of the problem involved, the data already at hand, the availability of reliable measuring devices, and the time and money to be expended.

Analysis of thirty-five state school surveys shows the frequent application of eight different methods to the problems met in making the surveys. Table 1 gives the methods, their frequency of use, and the problems to which each was applied.

1. *Analysis of existing statistical records.* Analysis of existing records is the only method used in every survey. Data were used pertaining to such factors as tax rates, school funds, expenditures, indebtedness, illiteracy, enrolment and attendance, transportation, school term and school day, and the tenure and turnover, salaries, certificates, training, experience, and load of teachers.

2. *Questionnaires.* When records containing the desired information were not available, questionnaires were circulated among those from whom the desired information could most readily be obtained. Probably the most extensive use of this method, in point of number of inquiries circulated, was made by the California

[1] U. S. Department of the Interior, Bureau of Education. *An Educational Study of Alabama.* Bulletin, 1919, No. 41. Washington, D. C.: Government Printing Office, 1919. p. 9.

[2] Florida Educational Survey Commission. *Official Report to the Senate and House of Representatives.* Tallahassee, Fla.: State of Florida, April 2, 1929. p. 9.

[3] General Education Board. *Public Education in Delaware.* New York: General Education Board, 1919. p. vii of Preface.

[4] Bachman, Frank P. *Public Education in Indiana.* New York: General Education Board, 1923. See letter of transmittal, p. v-vi.

TABLE 1.—METHODS USED IN 35 STATE SCHOOL SURVEYS FOR ESTIMATING EFFICIENCY

Method of Study	Number of Surveys	Problems to Which Method Was Applied
1	2	3
1. Analysis of Existing Statistical Records	35	School finance, illiteracy, attendance, enrolment, transportation, school term and day, teacher tenure, salaries, certificates, training, experience, and teaching load.
2. Questionnaires Circulated Especially for the Survey	27	Salaries, training, tenure, age, experience and certification of teachers; courses of study; personnel of board of education; public opinion concerning the educational system as a whole; school term and school day; consolidation of schools; supervision; attendance officers; medical inspection and school nurses; office equipment and clerical assistance; family, salaries, expenses, savings and investments of rural teachers; teachers' institutes; school grounds, buildings, equipment, sanitation and janitor service; arrangement of class schedule; distance of pupils from school.
3. Interviews and Conferences	6	Organization and administration of school systems; curriculum study; the effectiveness of the vocational program.
4. Statistical Comparison with Other States	30	Salaries, enrolment, attendance, school support, illiteracy, training and experience of teachers and school officials, achievement of pupils.
5. Rating Scales	10	Teaching efficiency, buildings, courses of study.
6. Age Grade Studies and Related Methods of Determining Pupil Progress	18	Elimination, retardation, failure, promotion, acceleration.
7. Standard Tests of Achievement	13	Achievement of pupils; teaching efficiency; the effect on achievement of term length, amount of salaries paid teachers; cost of instruction; attendance and supervision.
8. General Observation	27	Teaching efficiency, buildings, courses of study, recitation periods.

Commission for the Study of Educational Problems.[1] The Commission circulated among residents of California more than fifty thousand short questionnaires printed on post cards in an attempt to learn "what the general public considers to be the most outstanding school problems." A summary of the results is given in the report of the Commission.[1] Twenty-six other surveys used the questionnaire in attacking various problems (see Table 1), usually circulating them among school administrators and teachers.[2]

3. *Interviews and conferences.* Most of the survey staffs held conferences at one time or another. Generally, these were for the purpose of organizing the work of the survey or for obtaining general information concerning the school situation. Most of such conferences were only incidental to the study; but at least six surveys used a series of definitely planned conferences and interviews as a means of obtaining specific information on particular problems. Typical accounts of the use of the conference and interview taken from these surveys show the type of problem to which this method was applied and the procedure followed.

California. The Commission for the Study of Educational Problems reports: "A major part of the Commission's investigations was conducted by means of personal interviews between the Commission as a body and more than one hundred individuals possessing special knowledge on one or more of the problems being studied. The list included state, county, and city school officials, university and college professors and administrators, teachers, labor leaders, agriculturists, county auditors, county supervisors, employers of young people, and others."[3]

Florida. In attempting to evaluate the vocational education program, the method chiefly relied upon was that of the conference or interview. The report states that most of the work was carried on "through conferences with public school officials . . . The data were secured by personal conferences with a total of 60 school administrators, supervisors, coordinators, and teachers, and with a total of 31 representative citizens called into conference for the purpose of determining community attitude toward the vocational program. Some of the state and local school officials sat in a number of the 46 hearings so that the total attendance at these hearings amounted to 193 people. Sample data were secured from 18 different public school communities representing an average spread of the rural and urban communities in Florida."[4]

West Virginia. Members of the survey staff met with the superintendents and boards of education of the largest cities in the state "to study, in general, the administrative organization with particular reference to relationships affecting administration."[5]

4. *Statistical comparisons with other states.* A useful means of estimating the relative efficiency of a school system, or of some part of it, is that of direct comparison with other systems. Thirty of the thirty-five surveys made statistical comparisons between the particular school system under investigation and other systems with respect to such factors as teachers' salaries, enrolment and attendance, school support, illiteracy, training and experience of teachers, and achievement of pupils. The Missouri and New Jersey surveys contain good illustrations of this procedure, part of which are reproduced as Tables 2 and 3.

5. *Rating scales.* As a rule the surveys' estimates of such factors as teaching efficiency, the school plant, and courses of study were based on random observation. Six of the surveys, however, attempted to supplement direct observation of the work of the teacher by objective ratings; eight used building score cards; and one used a score card for courses of study.

Survey reports from Indiana, New York, Texas, Utah, Virginia, and West Virginia give accounts of the use of various methods of rating teaching efficiency. Descriptions of the devices used follow.

Indiana. The Indiana "success schedule" for rating teachers was developed in compliance with an act of the State Legislature of 1915 which required the State Superintendent of Public Instruction to provide from time to time "such schedule of items as should, in his judgment, enter into the record and grading of a teacher's success by the city, town, and county superintendent of schools." The "success grades" of 428 rural teachers were obtained by the survey commission by means of a questionnaire. The "success schedule" rated teachers on personality, preparation, teaching technic, pupil achievement,

[1] California Commission for the Study of Educational Problems. *Report.* Vol. 1. Sacramento, Calif.: State Department of Public Instruction, 1930. p. 12.

[2] A study of the questionnaire as a research tool is available in: National Education Association, Research Division. "The Questionnaire." *Research Bulletin* 8: 1-52; January, 1930. Washington, D. C.: the Association.

[3] California Commission for the Study of Educational Problems. *op. cit.* p. 12.

[4] Florida Educational Survey Commission. *Official Report to the Senate and House of Representatives.* Tallahassee, Fla.: State of Florida, 1929. p. 356.

[5] Cavins, Lorimer V., director. *Survey of Education in West Virginia.* Vol. 1. Charleston, W. Va.: State Board of Education, 1928. p. 130.

management, professional attitude, and professional reading.[1]

New York. Personal observation of classroom instruction in the rural high schools of New York was controlled to some extent by the formulation of a plan which would direct the attention of the observer to certain phases of classroom work generally conceded to be indicative of its quality. The items collected were subjected to statistical treatment. The outline of the observation plan included: (1) class routine; (2) assignment and study guidance; (3) conduct of the recitation, with five special items for drill subjects such as mathematics and languages, and for recitations in other subjects; (4) general observations; and (5) critical comments. One hundred seventy-nine recitations, taught by 144 different instructors, were observed by a carefully trained staff of seven persons.[2]

Texas. The Texas survey staff also devised a form to aid in the observation of classroom procedure. The purpose of this form was "to eliminate as far as possible the personal reactions and judgments of the classroom observers." The items contained in the form emphasize the nature of the work in which pupils were engaged: as practising, drilling, or memorizing; reading and discussing stories; finding or reporting the point of view of the lesson; preparing or making reports to the class on individual assignments; working on group problems; and related activities. Twenty-four such questions were checked, giving the number of pupils engaged in each.[3]

Utah. The survey staff rated 141 teachers according to a ranking system devised for the purpose of the survey.[4] The teachers were ranked on personality traits, teaching skill and technic, the latter "to include such factors as stimulating pupils to think, make judgments, use initiative, execute; increasing pupil skills, fund of information, appreciation; creating wholesome ideals and attitudes." A marking

[1] Copy of "success schedule," p. 118-21. Indiana Rural Education Survey. *Report*. Indianapolis, Ind.: State Superintendent of Schools, State House, 1926. 130 p.

[2] Ferriss, Emery N. *The Rural High School*. Rural School Survey of New York State. Vol. 7. Ithaca, N. Y.: Joint Committee on Rural Schools, 1922. p. 127-46.

[3] Works, George A., director. *Courses of Study and Instruction*. Texas Educational Survey Report, Vol. 5. Austin, Texas: Texas Educational Survey Commission, 1924. See Appendix L, p. 517, for copy of form.

[4] U. S. Department of the Interior, Bureau of Education. *Survey of Education in Utah*. Bulletin, 1926, No. 18. Washington, D. C.: Government Printing Office, 1926. p. 343-44.

TABLE 2.—ILLUSTRATIVE INTERSTATE COMPARISONS: MISSOURI SURVEY[1]

(Computed from Data in *Research Bulletin* of the National Education Association, Vol. VII, No. 1, p. 9)

	Percentage of Income Expended for Public Elementary and High Schools		Percentage of Income Expended for Public Higher Education		Percentage of Income Expended for All Public Education	
Average for United States	2.41		.27		2.68	
Average for Eleven Comparable States	2.67		.40		3.07	
Missouri	2.22		.27		2.49	
Missouri's Deficiency from United States Average	.19		0		.19	
Missouri's Deficiency from United States Average in Percent	....	8[2]	....	0	....	7
Missouri's Deficiency from Average of Comparable States	.45		.13		.58	
Missouri's Deficiency from Average of Comparable States in Percent	....	17	....	22	....	19
Individual States:						
Arkansas	1.93		.24		2.17	
Illinois	2.17		.14		2.31	
Indiana	2.89		.32		3.21	
Iowa	3.32		.59		3.91	
Kansas	2.73		.45		3.18	
Michigan	3.02		.43		3.45	
Minnesota	3.05		.55		3.60	
Missouri	*2.22*		*.27*		*2.49*	
Nebraska	3.20		.54		3.74	
Ohio	2.53		.25		2.78	
Oklahoma	2.23		.40		2.63	
Wisconsin	2.34		.49		2.83	

[1] Missouri. *Eightieth Report of the Public Schools of the State of Missouri, School Year Ending June 30, 1929*. Vol. 1. Jefferson City, Mo.: State Superintendent of Schools, 1929. p.97.

[2] Computed thus: 2.41 (for United States)—2.22 (for Missouri) = .19. Then .19÷2.41 = 8% (nearest whole number).

scale of five letters was used: A, B, C, D, and E. Values were assigned to each letter according to a plan suggested by Rugg.[1] For each teacher trait, or composite of traits, each surveyor was asked to select from his experience: (1) a teacher to be rated as "A," being the best in this respect he had ever known, (2) a teacher to be rated as "E," being the poorest, and (3) a teacher to be rated as "C," being the average teacher. Teachers judged between "A" and "C" were rated "B" and similarly those between "C" and "E" were rated "D." The surveyors also observed the type of instruction, classifying it as disciplinary, socialized, or purposing, using the plan for analysis developed by Courtis.[2]

Virginia. In this survey teachers were rated on: (1) personality; (2) teaching ability, as indicated by motivation, pupil activity, vital material used, emphasis on topics, effective drill, organization, and individual attention; (3) disciplinary ability; (4) attention to seat work and study; (5) general rating; (6) supplementary activities, as Junior League, directed play, contests with other schools, etc.; (7) grade of certificate; and (8) experience. Seven counties, representative of the various sections of the state, were visited and a total of 103 elementary teachers were observed, the period of observation generally lasting fifteen or twenty minutes.[3]

West Virginia. The staff followed a definite procedure in developing a rating system for teaching. With the help of local educators they constructed a 20-point scale with five divisions: (1) classroom management, (2) the teaching process, (3) questions, (4) assignments, and (5) directed study. Each point was rated A, B, C, D, and E, according to the excellence of the item. In order that persons using the scale might be as nearly uniform as possible in their judgments, three members of the staff observed the same recitations and compared results. This process was repeated until the staff members were able to agree rather closely. In all, over 500 teachers were observed and rated by this scale.[4]

Eight surveys report the use of rating cards for measuring the efficiency of the school plant: Arizona, Florida, Missouri, New York, Texas, Utah, Virginia, and West Virginia. The methods used are summarized below.

Arizona. In order to make an appraisal, the school buildings were first divided into two classes: those with five or more rooms and those with less than five. Separate forms were devised for each class.[5] These forms consisted of a check-list or inventory sheet and a detailed score card. The check-list called

[1] Rugg, Harold O. "Self-Improvement of Teachers Through Self-Rating; a New Scale for Rating Teachers' Efficiency." *Elementary School Journal* 20: 670-84; May, 1920.

[2] In *Manual of Directions for Making Efficiency Card Ratings*. Detroit, Mich.: Board of Education, 1923.

[3] O'Shea, M. V., director. *Public Education in Virginia*. Report to the Educational Commission of Virginia of a Survey of the Public Educational System of the State. Richmond, Va.: Superintendent of Public Printing, 1928. p. 77-78.

[4] Cavins, L. V., director. *Survey of Education in West Virginia*, Vol. 1. Charleston, W. Va.: State Department of Education, 1928. p. 96-97.

[5] Almack, John C. *Check List and Measuring Scale for City School Classrooms* and *Check List and Measuring Scale for City School Buildings*. Stanford University, Calif.: School of Education. See also: Almack, John C. "Building Surveys and Building Measurement." *American School Board Journal* 70: 52-54; January, 1925.

TABLE 3.—ILLUSTRATIVE INTERSTATE COMPARISONS; NEW JERSEY SURVEY[1]

State	Percent of				Per Capita			
	Wealth in Public Schools		Income Devoted to Public Schools		Investment in Public Schools		Appropriation for Public Schools	
	%	Rank	%	Rank	Amount	Rank	Amount	Rank
Missouri	1.328	31	1.630	38	$46.26	26	$11.87	36
Montana	3.311	3	2.747	9	125.07	4	17.72	21
Nebraska	1.513	19	2.412	18	69.66	13	17.02	23
Nevada	1.335	30	2.285	22	97.47	8	26.61	2
New Hampshire	1.133	36	1.769	35	37.44	31	14.68	27
New Jersey	*1.502*	*20*	*2.325*	*20*	*58.36*	*15*	*19.77*	*10*
New Mexico	4.698	2	2.477	16	113.57	5	14.32	30
New York	1.410	24	1.613	39	56.15	16	18.63	16
North Carolina	1.357	27	2.314	21	29.38	37	9.95	38
North Dakota	3.187	5	5.230	1	139.81	3	33.66	1
U. S. (Exclusive of D. C.)	1.484	.....	2.039	.....	$47.66	.....	$15.56	.....

[1] New Jersey. *Report of the Commission to Survey Public Education* (Harlan Updegraff, director). Trenton, N. J.: State of New Jersey, 1930. p. 32. The data in this table were gathered from various sources. They do not purport to be exact figures in all cases, but are substantially correct and represent, according to the Survey, an approximate picture of the situation in 1926. Only part of the table is reproduced here.

for actual measurements, inventories, and other objective data. An article or item was judged (1) worthless, (2) in need of repair, (3) good enough to be usable, (4) in good condition, or (5) new and in excellent condition.[1]

Florida, Utah, Virginia, West Virginia. The elementary, high school, and college buildings of these four states[2] were scored by one or more of the three rating cards designed by Strayer, Evenden, and Engelhardt[3] for these three types of buildings.

Missouri. The survey staff supplemented its study of school buildings by means of a checking schedule for specifications which was developed from an analysis of specifications of some of the best recently constructed school buildings of the country. Then the survey staff checked sets of specifications from 30 of the most recently erected buildings in Missouri. The items of the working drawings were rated as excellent, mediocre, poor, or omitted. In the course of the survey the plans of 125 buildings were checked "for three different purposes—(1) to discover the adequacy of the working drawings submitted by architects and purchased by boards of education; (2) to determine the adaptability of the plan to educational needs and its fitness for educational use; and (3) to discover whether the conditions of the contract were favorable to the board of education and whether sufficient detail was written into the specifications to make possible highly competitive bidding to the ends that boards were purchasing school buildings at the lowest possible price."[4]

New York, Texas, Utah, West Virginia. The small rural schools in these four state surveys[4] were rated by a scale designed especially for the small school by Butterworth.[6]

Virginia. The small school buildings were rated by a score card developed by the survey itself. The buildings and grounds were rated on such items as general condition of the school plant, heating, lighting, and ventilating systems, cloakrooms, toilet facilities, fuel storage facilities, and articles of equipment, as desks, maps, globes, window shades, and library books. Each item was rated on a five-point scale. Independent ratings, as made by different members of the staff, were compared and individual variations in grading were eliminated as far as possible.[7]

While courses of study are usually evaluated by general observation, the Missouri Survey Report[8] mentions the use of criteria for rating courses of study developed by the Bureau of Curriculum Research, Teachers College, Columbia University.[9]

Further attempts to supplement random observation with quantitative analysis in evaluating either the course of study or the skill of the teacher in applying it to the daily program are indicated in seven surveys which take account of the time allotted to recitation periods, subjects, or grades.

6. *Methods of determining pupil progress.* Eighteen of the surveys undertake to determine the progress of pupils through school by means of age-grade studies and related methods including studies of the number of pupils promoted, accelerated, retarded, or eliminated from school. The Florida survey[10] investigated the age-grade status of the children in ten coun-

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[1] Tupper, C. Ralph. *A Survey of the Arizona Public School System.* Phoenix, Ariz.: State Board of Education, 1925. p. 60.

[2] Florida Educational Survey Commission. *Official Report to the Senate and House of Representatives.* Tallahassee, Fla.: State of Florida, 1929. p. 660.

U. S. Dept. of the Interior, Bureau of Education. *Survey of Education in Utah.* Bulletin, 1926, No. 18. Washington, D. C.: Government Printing Office, 1926. p. 383.

Inglis, Alexander, director. *Virginia Public Schools,* Part I. Yonkers, N. Y.: Virginia Education Commission and Virginia Survey Staff, 1920. p. 241.

Cavins, L. V., director. *Survey of Education in West Virginia,* Vol. 3. Charleston, W. Va.: State Board of Education, 1928. "School Buildings," p. 69.

[3] Strayer, George D., and Engelhardt, N. L. *Score Card and Standards for Elementary School Buildings.* New York: Teachers College, Columbia University, 1923. 57 p.

Strayer, George D., and Engelhardt, N. L. *Score Card and Standards for High School Buildings.* New York: Teachers College, Columbia University, 1924. 95 p.

Evenden, E. S., Strayer, G. D., and Engelhardt, N. L. *Score Card and Standards for College Buildings.* New York: Teachers College, Columbia University, 1929.

[4] Strayer, George D., and Engelhardt, N. L., Division of Field Studies, Institute of Educational Research, Teachers College, Columbia University. *A Preliminary Report of the Survey of the Public Schools and Higher Institutions in the State of Missouri,* Jefferson City, Mo.: State Superintendent of Public Schools, 1929. p. 78-85.

[5] Works, George A., and others. *Rural School Survey of New York State,* Vol. 3. Ithaca, N. Y.: Joint Committee on Rural Schools, 1922. 131 p.

Works, George A., director. *Texas Educational Survey Reports,* Vol. 1. Austin, Texas: Texas Educational Survey Commission, 1925. p. 313.

U. S. Dept. of the Interior, Bureau of Education. *Survey of Education in Utah.* Bulletin, 1926, No. 18. Washington, D. C.: Government Printing Office, 1926. p. 381.

Cavins, Lorimer V., director. *Survey of Education in West Virginia,* Vol. 3. Charleston, W. Va.: State Board of Education, 1928. p. 10.

[6] Butterworth, Julian E. "A Score Card for One and Two-Teacher School Buildings." *Journal of Rural Education* 2: 9-20; September, 1922.

[7] Inglis, Alexander, director. *Virginia Public Schools,* Part I. Yonkers, N. Y.: Virginia Education Commission and Virginia Survey Staff, 1920. p. 240-41, and Table 104.

[8] Strayer, George D., and Engelhardt, N. L., Division of Field Studies, Institute of Educational Research, Teachers College, Columbia University. *A Preliminary Report of the Survey of the Public Schools and Higher Institutions in the State of Missouri.* Jefferson City, Mo.: State Superintendent of Public Schools, 1929. p. 109.

[9] Stratemeyer, Florence B., and Bruner, H. B. *Rating Elementary School Courses of Study.* Bulletin No. 1. New York: Bureau of Curriculum Research, Teachers College, Columbia University, 1926. 193 p.

[10] Florida, *op. cit.,* p. 214-28.

ties. With these data as a basis it reports on the retardation and failure, acceleration and promotion of pupils, and the holding power of the Florida schools beyond the compulsory age limit. The other surveys using this method make similar reports.

7. *Standard tests.* Thirteen of the surveys obtained data on pupil progress and achievement by means of standardized educational tests. This method is considered of sufficient importance to merit a more detailed treatment than could well be given it at this point. For a discussion of this topic see the next section of this Bulletin.

8. *General observation.* One of the most widely used of the survey methods is that of general observation. Twenty-seven of the surveys give specific accounts of its use in estimating teaching efficiency, the school plant, and courses of study. In many cases the survey relied solely upon this method to supply data on these problems; in some instances its use was supplemented by objective ratings. The older surveys indicate almost complete reliance on general observation supplemented by whatever school records were available. As the survey movement advanced, more objective methods were increasingly employed, but these have never been used completely to supplant the method of direct, personal observation which has its own peculiar contribution to make in the study of a school system. It remains as yet the only way of providing the vital, personal experience by which to judge certain subjective and yet important elements in a school situation, as the "atmosphere" of a school, the "personality" of the teacher, or the "attitude" of the pupils—all intensely subjective factors which do not readily lend themselves to objective treatment. The most extensive school surveys supplemented objective methods by a certain amount of general observation. It is omitted only from those confined to some particular problem, as school legislation, where this method does not well apply.

Organization and administration of the surveys—The organization and administration of a state school survey doubtless has much to do with its accuracy and effectiveness. One or more experts are always placed in charge of the investigation, but a study of the administrative aspects of the thirty-five surveys shows that no single, general plan of action is followed.

While the staff usually consists of fifteen or sixteen members, its size ranges from one to forty-six. The typical state school survey as revealed by this analysis is authorized by the state legislature. In a few instances surveys have been authorized by state departments of education, superintendents of public instruction, governors of states, or even by committees of laymen interested in the educational welfare of the state.

The cost of the typical state school survey is usually covered by a state appropriation of $25,000, although the cost may run up as high as $75,000. In some cases the expenses of the survey are borne wholly or in part by individuals or by organizations.

The time allowed for field work varies from ninety to more than five hundred days. A year usually elapses between the acceptance of the survey commission and the publication of the report, the time varying from three months to two years.

The report is usually published by the organization or individual sponsoring the investigation. Of the 35 state survey reports analyzed, sixteen were published by the state, ten by the Federal Government and nine by private means. The complete report may be quite brief, as in the case of the Minnesota report which contained only 56 pages, or it may comprise two, three, four, or even eight volumes. Exclusive of the New York and Texas reports, which together occupy sixteen volumes and over four thousand pages, the median number of pages in the thirty-three remaining surveys is about 250. Much of the objective data contained in the reports are in the form of tables which are in many cases illustrated by graphs and charts. The emphasis of the report is usually given to school costs, rural education, school laws, and state and local school administration.

The state school survey does not directly attempt to remedy the weaknesses of a state school system. This is outside its province. Corrective measures are in the hands of the people of the state and their representatives. The survey may be said to have performed its mission when it has investigated the school situation as carefully and scientifically as possible with the means at its command; when it has made a report of its findings with recommendations for improvement; and when it has

aroused public interest sufficiently to assure that at least the most outstanding difficulties will be subjected to remedial action. A study has been made which throws some light on factors which contribute to or hinder the success of the school survey. Garlin has collected data from 21 states and 48 cities on factors which condition its success. According to frequency of mention by the states reporting, the twelve factors contributing most to the success of the state school survey were (1) support of the newspapers, (2) cooperation of the state department of education, (3) presenting actual facts, (4) placing copies of the survey report in the hands of leaders, (5) reasonable recommendations, (6) leadership of teachers and cooperation of county and township superintendents, (7) support of leading citizens, (8) outside survey staff, (9) sensible view of school conditions and problems by the survey staff, (10) support of the survey by the women of the state, (11) emphasis on evident school needs, and (12) presenting a complete school code.

The six most frequently mentioned obstacles to the success of the state school survey were (1) reaction against taxes, (2) the fact that considerable time is required to reap the full benefits of a survey, (3) conservatism of the people, (4) politics, (5) increased cost of public education, and (6) failure to prepare enough local leaders.[1]

Many of these factors are largely within the control of the survey commission. Proper organization, cooperation, and publicity contribute much to the success of the state school survey.

Summary of the state school surveys—The foregoing analysis of the scope, methods, and administration of thirty-five general state school surveys reveals at many points the important contributions to research technics made by these investigations. These contributions, as far as the measurement of school efficiency is concerned, are of three general types. First, the surveys have independently developed and applied a number of useful statistical procedures, score cards, and other devices which throw light on some of the problems involved in estimating the various aspects of state school achievement. Second, the surveys have served as proving grounds for trying out tests and other measuring devices developed elsewhere. They have supplied an important practical outlet for the product of individual research workers. Finally, the survey movement as applied to state school systems has made educators and the general public alive to the values of a continuing appraisal of efficiency from within the school system. The special technics of the survey have tended to become a part of the regular work of state school leadership and control. The report of a state school survey may thus have an indirect influence extending for many years beyond the date of the survey itself.

The Self-Survey Plan

A systematic review of the important facts concerning the organization of a state school system may be made with advantage either by those within or without the state concerned.

The self-survey plan for estimating state school efficiency provides a means whereby those interested in the educational welfare of a school system may discover for themselves its weak and strong points. The Research Division of the National Education Association has recently published such a plan,[2] consisting of fifteen check-lists, and a handbook for the purpose of explaining and supplementing the check-lists. This plan may be used either by educators or laymen to review the facts basic to the efficiency of their own state school system. The plan is not a substitute for a highly detailed appraisal by experts called in for consultation from without the school system.

The check-lists and handbook are published separately, the March, 1930 Bulletin of the Research Division containing the check-lists, and the May, 1930 Bulletin, the handbook.

The criteria of administrative efficiency comprising the check-lists are derived from the composite judgment of leading American authorities on school administration. Such a composite was secured through conferences with leading state school experts and twenty state departments of education and through analysis of more than two hundred state school surveys, theses, monographs, and books. The validity of the plan is based, therefore, on a systematic attempt to secure a cross-section of the best judgment and experience available.

[1] Garlin, R. E. "Factors Conditioning the Success of School Surveys." *School and Society* 28: 337-40; September 15, 1928.

[2] National Education Association, Research Division. "A Self-survey Plan for State School Systems. Part I, Check-lists; Part II, Handbook." *Research Bulletin* 8: 53-88, 89-164; March, May, 1930. Washington, D. C.: the Association.

TABLE 4.—SELF-SURVEY PLAN FOR STATE SCHOOL SYSTEMS AS APPLIED TO SEVEN STATES

TABLE 4.—SELF-SURVEY PLAN FOR STATE SCHOOL SYSTEMS AS APPLIED TO SEVEN STATES

	Iowa	Maryland	New York	Pennsylvania	Utah	Washington	West Virginia
Checklist for Attendance Laws and Their Enforcement:							
1. Is an annual or continuing school census on a state-wide basis required by law?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2. Does the law permit local school districts to establish and maintain public kindergartens?	Yes	Yes	Yes	Yes	Yes	Yes [1]	Yes
3. Must all normal children of seven years and over be enrolled in public or approved non-public schools?	Yes	Yes	Yes	No [2]	Yes[3]	No	Yes
4. Is full-time school attendance required of all normal children, without exception, at least through age 16?	No	No	No [4]	No	Yes	No	No
5. If full-time school attendance is not required beyond age 16, is a system of free, compulsory part-time continuation schools maintained at least up to age 18?	No	No	No [5]	No	Yes	No	No
6. Must all schools be maintained at least 8 months or 160 days?	Yes	Yes	Yes[6]	Yes	Yes	No	Yes
7. Is the appointment of some officer for checking attendance provided for by law in each school unit?	No	Yes	Yes	Yes	Yes[3]	Yes	Yes
8. Is the appointment of attendance officers wholly in the hands of school authorities?	Yes	Yes	Yes[7]	Yes	Yes	Yes	Yes
9. Are professional or educational qualifications required of attendance officers?	No	Yes	No	No[5]	No	No	No
10. Does the state department of education include a person to whom is assigned the supervision of attendance?	No	Yes	Yes	Yes	No	No	No
11. Is there a uniform state-wide system of attendance records and reports?	No[8]	Yes	Yes	Yes	Yes	Yes	Yes
12. Are non-public schools required to make attendance reports to public school officials?	Yes	Yes	Yes	Yes	Yes[4]	Yes	No
13. Does the state department of education maintain a policy of continuous study and improvement of conditions relating to attendance laws and their enforcement?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Checklist for Child Labor Laws:							
1. Is the minimum age for employment at least 16 at times when schools are open (except for work at home in agricultural pursuits and domestic service when schools are not in session)?	No	No	No	No	Yes	No	No
2. Is the minimum age for employment in mines and quarries 18?	No	No	No	No	Yes	Yes	No
3. Are physical examinations required of all children before a first certificate or permit for going to work is issued?	Yes	Yes	Yes	Yes	No	No	Yes
4. Are physical examinations required either whenever a child for whom an employment certificate or permit is required changes employers or at stated intervals after a child goes to work?	Yes	Yes	Yes[10]	Yes	No	No	No
5. Is 8 hours work a day, including time spent in continuation school, the maximum for minors under 18?	No	No	No[11]	No	Yes	Yes	Yes
6. Is a 44 hour week, including time spent in continuation school, the maximum for minors under 18?	No	No	No	No	No	Yes	No
7. Are employment certificates or work permits required for all workers under 18?	No	No	No[5]	Yes	Yes	No	No
8. Is the employment of minors under 18 in hazardous occupations forbidden?	No	Yes	Yes	Yes	No	No	No
9. Is the completion of the 8th grade or 8 years of school attendance required for the issuance of an employment certificate or work permit?	No	No	Yes[12]	No	Yes	No	No
10. Is the employment of minors under 18 between 7 p. m. and 6 a. m. forbidden?	No	No	No[5]	No	No	No	No
11. Is there any specific regulation of the work of children in agricultural pursuits?	No	No	Yes	No[13]	Yes	No	No
12. Is the employment of minors in street trades regulated?	Yes	Yes	Yes	Yes	Yes	No[14]	No
13. Is the work of issuance of employment certificates supervised by state authority?	Yes	Yes	Yes	Yes	No	No	Yes
14. Does the state department of education or the state department of labor, or some other state agency maintain a policy of continuous study and improvement of conditions relating to child labor laws?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Checklist for Pupil Personnel and Adjustment:							
1. Does the state department of education make a state-wide study of age-grade progress at least biennially?	Yes	Yes[15]	No[16]	Yes	Yes	No	No
2. Are there regulations covering the maximum and minimum sizes of classes or pupil-teacher ratios?	No	Yes	No	No	No	No	No
3. Are there regulations concerning a minimum enrolment for schools?	Yes	Yes	No	Yes	No	Yes	Yes
4. Does the law require local units to provide special school facilities, where necessary, for handicapped children?	No	Yes	Yes	Yes	No	No[17]	Yes
5. Is the educational work of the state or local reform schools under direction of the state board of education or state department of education?	No	Yes[18]	No	Yes	No	No	Yes
6. Is the appointment of school nurses, wherever needed, required by law?	No	Yes[19]	Yes	No	No	No	Yes
7. Is the appointment of school physicians, wherever needed, required by law?	No	Yes[19]	Yes	Yes[20]	No	No	No
8. Does the state department of education include a person to whom is assigned the supervision of conditions relating to the health, welfare, and adjustment of pupils?	No	Yes	Yes	Yes	Yes	Yes	Yes
Checklist for Teacher Training and Supervision:							
1. Have all teacher-training classes in connection with high schools been abandoned in favor of state normal schools or teachers college?	No	Yes	No[21]	Yes	Yes	Yes	Yes
2. Is graduation from high school required for admission to all institutions accredited by the state for teacher-training purposes?	Yes	Yes	Yes	Yes	Yes	Yes	Yes

TABLE 4.—SELF-SURVEY PLAN FOR STATE SCHOOL SYSTEMS AS APPLIED TO SEVEN STATES—(*Continued*)

	Iowa	Maryland	New York	Pennsylvania	Utah	Washington	West Virginia
Checklist for Teacher Training and Supervision: (Continued)							
3. Do teacher-training institutions offer a variety of curricula leading to definitely differentiated positions?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4. Do you avoid separate boards of control for each of the state teacher-training institutions? (State University and A. & M. Colleges not included)	Yes	Yes	Yes	No	*	No	Yes
5. Are free placement services available to the graduates of all state teacher-training institutions?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6. Institution in all state teacher-training institutions free to residents of the state?	No[22]	Yes[23]	Yes	Yes	No	No	Yes
7. Is a social development program an integral part of the curriculum of teacher-training institutions?	Yes	Yes	Yes	Yes	Yes	No	Yes
8. Is there a uniform, permanent, and continuous census of teachers and their qualifications?	Yes	Yes	No[24]	Yes	Yes	Yes	Yes
9. Is every teacher in the state directly responsible to a superintendent, principal, or supervisor for educational work performed?	No	Yes	Yes	Yes	Yes	No	No
10. If the personnel available for supervisory work in rural schools is relatively inadequate, do you supplement it by two or more of the following devices: reading circles, demonstration schools, helping teachers, teachers' institutes?	Yes	*	Yes	Yes	Yes	Yes	Yes
11. Do the state teacher-training schools of the state department of education, or both, have a definite program of follow-up work and continuation training for their graduates?	No	Yes	No	Yes	Yes	No	No
12. Do the state teacher-training institutions or the state department of education, or both, maintain a policy of continuous study and improvement of the curriculum and other factors in the preparation of teachers?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Checklist for Certification of Teachers:							
1. Are at least two years of education beyond graduation from high school required for all initial elementary certificates?	No	Yes	No	Yes	Yes	Yes	No
2. Are at least four years of education beyond graduation from high school required for all initial secondary certificates?	Yes	Yes	No[25]	Yes	Yes	Yes	Yes
3. Does the state have the exclusive authority to issue certificates?	Yes	Yes	Yes	Yes[26]	Yes	Yes	Yes
4. Are certification requirements, other than general minimum standards, set by the state board of education rather than by statute?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5. Is a special certificate for administration and supervision required?	No	Yes	Yes[24]	Yes	Yes	No	Yes
6. Are special certificates for teachers of special subjects and classes (e. g. music, art, etc.) provided?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7. Are high-school certificates differentiated as to validity among the various secondary school fields?	No	Yes	No	Yes	No	No	Yes
8. If life diplomas are issued, are they invalidated when holder discontinues educational work for a period of years?	Yes	Yes	No	No	Yes	No	No
9. Are equivalent training and experience secured in other states recognized as a basis for certification?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
10. Is a minimum age of at least 18 required for all certificates?	No	Yes	Yes	Yes	Yes	Yes	Yes
11. Is the candidate required to give evidence of moral character?	Yes	No	Yes	Yes	Yes	Yes	Yes
12. Is a certificate of good health required for all initial certificates?	No	Yes	No	Yes	No[27]	Yes	No
13. Have examinations as a basis for initial certification been discontinued in favor of the recommendations of teacher-training institutions?	No	Yes	No[28]	Yes[28]	Yes	Yes	No
14. Has certification on the basis of teacher-training work in high schools been discontinued?	No	Yes	No[28]	Yes	Yes	Yes	Yes
15. Are all initial certificates of a probationary nature, valid for a limited period?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
16. Are there equivalent (although not necessarily identical) minimum certification standards for rural and city teachers?	Yes	Yes	No[28]	Yes	Yes	Yes	Yes
17. Is practice teaching or experience required of candidates for all teachers' certificates?	Yes	Yes	No	Yes[26]	Yes	No[28]	No
18. Are teachers in non-public schools required to meet standards essentially equivalent to those required of public school teachers?	No	Yes[29]	No[30]	No[31]	No	Yes	No
Checklist for Employment and Contracts:							
1. Is a try-out period of teaching service specified?	No	Yes	No[32]	Yes	No	No	No
2. Is an indefinite appointment required after this try-out period?	No	Yes	No[32]	Yes	No	No	No
3. May continuous employment be made contingent upon a reasonable program of study or other forms of improvement?	No	Yes	No	Yes	Yes	No	No
4. May teachers on indefinite status be dismissed for proven incompetency or other good cause?	*	Yes	Yes	Yes	Yes	Yes	No
5. Is the power to dismiss in the hands of the appointing body?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6. Is a notice of dismissal required by law?	Yes	Yes	No[32]	Yes	No	No	Yes
7. May dismissed teachers appeal to the state educational authority?	Yes	Yes	Yes	No	Yes[8]	Yes	Yes[33]
8. Are the laws governing employment and contracts of teachers state-wide in their application?	Yes	Yes[34]	Yes	Yes	Yes	Yes	Yes
9. Are teachers penalized for the violation of a contract without the consent of the employer?	No[35]	Yes	Yes	Yes	No	Yes	Yes
10. Does the state department of education maintain a policy of continuous study and improvement of the factors affecting teachers' contracts?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Checklist for State Salary Laws:							

ing teachers' contracts?	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Checklist for State Salary Laws:

1. Are there state regulations governing the minimum amount of teachers' salaries?	Yes	Yes	Yes	Yes	No	No	Yes
2. If there are state minimum salary regulations, does the state schedule prescribe salaries which increase with experience?	Yes	Yes	Yes	Yes	*	*	Yes
3. If there are state minimum salary regulations, does the state prescribe salaries which increase with training or grade of certificate?	Yes	Yes	No	Yes	*	*	Yes
4. Are apportionments from state funds made to enable local units to comply with the state minimum salary laws?	No	Yes	Yes	Yes	Yes	*	Yes
5. Are local units authorized to grant sabbatical leave with full or part pay?	No	No	No	Yes	No[36]	Yes	No
6. Are local units authorized to grant sick leave with pay?	No[36]	Yes	Yes	Yes	No[36]	No	No

Checklist for Professional Organizations:

1. Are at least 50% of the teachers of the state members of the National Education Association?	No	No	No	No	Yes	No	No
2. Are at least 90% of the teachers of the state members of their state education association?	No	No	No[37]	Yes	Yes	Yes	No
3. Is a full-time executive secretary employed by the state education association?	Yes	No	Yes	Yes	Yes	Yes	Yes
4. Has the state association adopted a code of ethics for the teaching profession?	Yes	No	Yes	Yes	Yes	Yes	No
5. Does the state association publish a journal?	Yes	No	Yes	Yes	Yes	Yes	Yes
6. Does the state association have committees actively at work on teaching problems?	Yes	Yes	Yes	Yes	Yes	No	Yes
7. Does the state association have committees actively at work on problems of school finance and administration?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8. Does the state association have committees actively at work on problems directly connected with teacher welfare?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9. Does the state association hold an annual convention, either state-wide or by districts?	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Checklist for Teacher Retirement Systems:

1. Is there a state-wide teacher retirement system?	No	Yes	Yes	Yes	No	Yes	No
2. Is membership required of new teachers?	*	Yes	Yes	Yes	*	Yes	*
3. Do both teachers and public contribute to the support of the retirement system?	*	Yes	Yes	Yes	*	No[38]	*
4. Is the method of determining the total amounts to be deposited in the retirement fund by teachers and the payments to be made by the public fixed by law?	*	Yes	Yes	Yes	*	Yes[39]	*
5. Is the retirement system organized on the reserve basis so that the moneys necessary to meet all obligations will be regularly accumulated without the necessity of recurring legislation?	*	Yes	Yes	Yes	*	No	*
6. If teachers leave service prior to retirement, may they withdraw their deposits?	*	Yes	Yes	Yes	*	Yes[40]	*
7. If teachers die prior to retirement is the sum of their deposits payable to their heirs or estate?	*	Yes	Yes	Yes	*	No[41]	*
8. Is an age for compulsory retirement fixed?	*	Yes	Yes[42]	Yes	*	No	*
9. Is a periodic actuarial investigation of the retirement system provided?	*	Yes	Yes	Yes	*	No	*
10. Is provision made for retirement for disability?	*	Yes	Yes	Yes	*	Yes	*
11. Are public funds used to pay for prior service benefits?	*	Yes	Yes	Yes	*	No	*
12. Is provision made for cooperative or reciprocal relations with other sound teacher retirement systems?	*	No	Yes	No	*	No	*

Checklist for Sources of School Revenue:

1. Does the state board of education control the investment of the permanent school fund?	No	*	No	Yes	No	No	No
2. Is the investment of the permanent school fund in bonds of the state prohibited?	Yes	*	No	No	No	No	No
3. Must all losses from the permanent school fund be made good from income or special appropriations?	Yes	*	No	Yes[43]	Yes	Yes	No
4. Is a unified state education budget prepared by the state department of education or by some other responsible agency?	No	Yes	Yes	Yes	No	No	No
5. Is the total amount of state school aid determined in such a way that it increases with increased school attendance or other similar measure of educational need?	No	Yes	Yes	Yes	Yes	Yes	No
6. Are constitutional maximal limitations on local or state school taxes avoided?	Yes[44]	Yes	Yes	Yes	No	No	Yes
7. Is a state personal income tax levied to supplement the general property tax?	No	No	Yes	No	Yes	No	No
8. Is a state business income tax levied to supplement the general property tax?	No	No	Yes	No	Yes	No	No
9. Is there a permanent state tax commission or tax commissioner?	Yes	Yes	Yes	No	Yes	Yes	Yes
10. Are all local school units required to levy a school tax?	No[45]	Yes	Yes	Yes	Yes	No	Yes
11. Are the school boards of all local school tax units fiscally independent?	Yes	No	No	Yes[46]	Yes	Yes	Yes
12. Are non-public schools not conducted for profit, exempted from taxation on buildings and grounds used for instructional purposes?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
13. Is bonding for current operating expenses prohibited?	Yes	Yes	Yes	No	No	Yes	Yes
14. Does the law require school district bonds to be of the serial type?	Yes	No	No	No	No[47]	Yes	Yes
15. Does the state department of education maintain a policy of continuous study of the most effective and equitable methods of securing revenue for schools?	Yes	Yes	Yes	Yes	Yes	Yes	Yes

TABLE 4.—SELF-SURVEY PLAN FOR STATE SCHOOL SYSTEMS AS APPLIED TO SEVEN STATES—*(Continued)*

	Iowa	Maryland	New York	Pennsylvania	Utah	Washington	West Virginia
Checklist for Apportionment of State School Funds:							
1. Does the law fix, or is the state board of education empowered to fix, minimum school tax-rate requirements which local units must levy in order to receive state aid?	No	Yes	Yes	No	Yes	No	Yes
2. Is there a state equalizing fund apportioned so as to recognize differences in local financial ability to support schools?	No	Yes	Yes	Yes	Yes	No	Yes
3. Does the state apportionment amount to at least 20 percent of the operating cost of public schools?	No	Yes	Yes	No	Yes	Yes	No
4. Is the use of census or enrolment statistics as bases for apportioning the state school funds avoided?	No	No[48]	Yes	Yes	No	Yes	No
5. Does the state department of education conduct a continuous and systematic study of the effect of the present system of state apportionments on the welfare of the schools?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Checklist for Material Equipment:							
1. Is there a division of school housing or a school architect in the state department of education?	No	Yes	Yes	Yes	Yes[49]	No	No
2. Are minimum school building standards set by the state board or state department of education?	No	Yes	Yes	Yes	Yes	No	No
3. Is there a state schoolhousing code?	No	No[50]	Yes	Yes	Yes	No	No
4. Must free textbooks be supplied in elementary schools?	No	Yes	No	Yes	Yes	No	No
5. Must free textbooks be supplied in secondary schools?	No	Yes	No	Yes	No	No	No
6. If the adoption of textbooks is on a state-wide basis, is the state board or state department of education the adopting authority?	*	No	*	*	No[51]	*	Yes
7. If the adoption of textbooks is on a state-wide basis, is the adoption in terms of a multiple list?	*	No	*	*	Yes	*	No
8. Are small local districts combined for the purpose of purchasing standard school supplies?	No	*	No	No	Yes	No	No
9. Does the state department of education give advisory service in connection with the purchase of school supplies?	No	Yes	Yes[52]	No	No	No	No
Checklist for State Board of Education:							
1. Is the state board of education predominantly a lay body?	Yes	Yes	Yes	Yes	No	No	No
2. Are ex-officio members omitted from the personnel of the board?	Yes	Yes	Yes	Yes	No	No	No
3. Does the board consist of more than 4 and less than 10 members?	Yes	Yes	No	Yes	Yes	Yes	Yes
4. Are terms of office at least five years?	Yes	Yes	Yes	Yes	Yes	No	Yes
5. Do terms of office of members overlap?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6. May members be removed during their term of office only on proved charges of malfeasance and other specified derelictions?	Yes	Yes	Yes	No	Yes	Yes	Yes
7. Is service on the board without regular salary?	Yes	Yes	Yes	Yes	Yes	Yes	No
8. Are there at least four fixed meetings of the board annually?	Yes	Yes	Yes	Yes	No[53]	No	Yes
9. Does the board appoint the chief state school officer?	No	Yes	Yes	No	No	No	No
10. Does the board fix the salary of the chief state school officer?	No	Yes	No	No	No	No	No
11. May the chief state school officer be removed during his term of office by the state board of education only for neglect of duty and similar derelictions?	No	Yes	No	No	No	*	No
12. Does the board act as a board for vocational and agricultural education in the Federal program?	No	Yes	Yes	Yes	Yes	Yes	Yes
Checklist for State Department of Education:							
1. Is the state superintendency open to all without regard to residence?	No	Yes	Yes	Yes	No	No	No
2. Is the term of office either indefinite or for a period of at least four years?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3. Is the salary of the chief state school official adequate?	No	Yes	Yes	Yes	No	No	No
4. Is the state superintendent required by law to be a professional educator?	Yes	Yes	No	No	Yes	No	Yes
5. Does the state department of education provide suggested courses of study and similar helps for schools?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6. Does the state department of education prepare a uniform system of recording receipts and expenditures for use by local units?	Yes	Yes	No	Yes	No	No	Yes
7. Does the state department of education include personnel sufficient to discharge all generally recognized educational functions?	No	Yes	Yes	Yes	No	No	Yes

functions?	No	Yes	Yes	Yes	No	No	Yes

Checklist for Higher and Adult Education:							
1. Is the term of office of members of the controlling board or boards of state higher institutions at least seven years?	No	Yes	Yes	No	No	No	No
2. Are there ten or less members on the controlling board or on each of the controlling boards?	Yes	Yes	Yes	Yes	No	Yes	No
3. Are members of the controlling board or boards selected from the state at large?	Yes	Yes	No	Yes	Yes	Yes	Yes
4. Do the terms of members of the controlling board or boards overlap?	Yes	Yes	Yes	No	Yes	Yes	Yes
5. Do members of the controlling board or boards serve without regular salary?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6. May members of the controlling board or boards be removed during their term of office only on proved charges of malfeasance and other specified derelictions of duty?	Yes	Yes	No	Yes	Yes	No	Yes
7. Are there legal provisions or administrative regulations which give the state board of education the power to control degree-selling or otherwise irresponsible educational institutions?	No	Yes	Yes	Yes	No	No	No
8. May public funds be expended for the support of public junior colleges?	Yes	No[54]	Yes	Yes	Yes	No[54]	No
9. Does the law providing for the establishment of junior colleges fix minimum prerequisites in terms of financial resources or enrolment?	No	*	No	No	No	*	*
10. Has the state enacted legislation promoting adult classes in English and citizenship?	No	No[55]	Yes	Yes	Yes	Yes	Yes
11. Does the law authorize boards of school trustees to permit the use of school buildings as community centers?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
12. Does the state department of education or some other competent official body maintain a policy of systematic study and improvement of adult education?	Yes	Yes	Yes	Yes	Yes	Yes	Yes

* Does not apply.

[1] Except in third-class districts.

[2] Children are permitted to enter school at six and are required to attend at eight years. With few exceptions all children from six to eight are in school.

[3] In practice.

[4] Children out of school must have employment certificates.

[5] Yes, under 17.

[6] Requirement is 190 days, including legal holidays.

[7] Civil Service eligible list where Civil Service is set up in city or village. Town attendance officers are nominated and removed by district superintendent.

[8] Home and school visitors elected as such must be certificated.

[9] However, reports to county and state are uniform.

[10] New certificate required for new job if 12 months elapse since first granted.

[11] Yes, under 16.

[12] Yes, for pupils of 14; 6th grade for pupils of 15.

[13] Except during school hours.

[14] Yes, for messenger service.

[15] Yes, except for Baltimore City which gathers these data every semester and summarizes them every three years.

[16] Yes, in cities and villages.

[17] Permissive in first-class districts.

[18] The educational work of reform schools is nominally under the State Department of Education. However, each school has a governing board. Members of the Department have given advice on finance and on the curriculum and buildings of these schools, but the initiative in such cases has been taken by the school.

[19] Such health service is provided without a legal provision requiring it.

[20] Whenever a prospective employee under 16 applies for an employment certificate, he must have a health certificate signed by a school physician.

[21] Two years beyond high school will be required after September, 1934.

[22] Tuition charges are called fees.

[23] In state normal schools only. Certain state scholarships are available in the colleges.

[24] Partial.

[25] Yes, after September, 1933.

[26] In a few instances a local superintendent may issue an emergency certificate, valid for three months, after which the state must validate the license.

[27] May be required by local boards.

[28] Yes, after September, 1934.

[29] Except in private secondary schools not seeking state approval.

[30] Yes, for registered schools.

[31] Law provides for non-public school certificate on a non-mandatory basis to maintain standards.

[32] Except in cities.

[33] In certain cases.

[34] Except in Baltimore City where the rules are similar to those of the state.

[35] However, the law invalidates a contract if a teacher is under simultaneous contract with another board in the state.

[36] In practice such leaves may be granted.

[37] New York City teachers work largely through local organizations.

[38] Provisions of retirement law indefinite on support from other sources than teachers' deposits. Data received on actual operation of the fund conflict with regard to public support.

[39] Retirement provisions cover specifically only the teachers' deposits.

[40] Deposits available without interest accumulations if teacher is dismissed.

[41] Only one-half the difference between amount contributed and sum of any disability benefits paid.

[42] Retirement not automatic at age 70, but on request of teacher or employer.

[43] Ultimately.

[44] Except for a constitutional limitation on amount of indebtedness.

[45] Except to retire bonds issued since 1927.

[46] Within the limits of the law.

[47] Yes, in practice.

[48] The effects of census and enrolment bases are offset by the operation of the equalization fund.

[49] Not in operation due to lack of funds.

[50] However, certain standards are implied in Question 2 above.

[51] State Textbook Commission adopts for state, except cities of first and second class.

[52] On some items.

[53] Although not fixed by law or regulation, 4 or more meetings are usually held.

[54] The state has no laws regarding junior colleges.

[55] There is no legislation promoting adult classes in English and citizenship; however, such classes exist in two of the three large cities.

The check-lists provide for the evaluation of five aspects of state school administration: (1) The child and his welfare, including attendance laws and their enforcement, child labor laws, and pupil personnel and adjustment; (2) The teaching profession, including teacher training and supervision, certification of teachers, employment and contracts, state salary laws, professional organizations and teacher retirement systems; (3) State school finance, including sources of school revenues and apportionment of school funds; (4) Material equipment; and (5) Administration and control, with special reference to the state board of education, the state department of education, and higher education.

There are 162 questions in the check-lists. Each question may be answered in three different ways: "yes," "no," or "does not apply." Space for comments is provided at the bottom of each page in which qualified answers may be written. A question answered in the affirmative indicates that the administrative system of a school organization has met a criterion of efficiency, while a negative answer usually means that it has failed to meet such a criterion. However, the interpretation of the data depends to some extent upon the particular situation under investigation.

The handbook discusses separately each criterion. It analyzes the implications of each, explaining terms used, indicating relationships to other criteria, giving special directions for their application to given situations and making suggestions for further study of the issues involved. In places it includes a brief summary of arguments intended to establish the validity of the criterion as a reliable indication of school efficiency.

Table 4 illustrates the application of the self-survey plan to states located in various parts of the United States. These states have not been selected as examples of either good or bad educational conditions. They are merely used to show how the plan works and what problems may arise in applying the check-lists to practical situations.

No attempt has been made, nor should be made, to add the number of affirmative answers for each state for the purpose of comparing the totals and drawing conclusions concerning the relative efficiency of the school organizations of these states. Such comparisons could only produce wholly unreliable results, since combining the various points into a total necessitates the assignment of a weight of one to each criterion with no justifiable basis for giving each an equal weight. Lack of knowledge of the exact weight to be given each criterion obviously prevents the combination of weightings into one mathematical quantity. No one knows whether the criteria on attendance laws should be more heavily weighted than those on sources of school revenue, or vice versa. As the introductory paragraphs to the check-lists[1] point out, the self-survey plan is a guide for diagnosis and "not a micrometer for making hair-line comparisons between states with respect to school efficiency." The fundamental purpose of this plan is the improvement of state school systems, rather than determining the educational rank of each or formulating an index of efficiency. Under this plan each system is to be checked against a series of generally accepted criteria of efficiency, with no attempt to reduce the results to a single mathematical expression.

Those who would avail themselves of the help afforded by the check-lists must be discriminating rather than arbitrary. Common sense should guide in interpreting the data. These criteria of administrative efficiency were selected with the general educational situation of the United States as a whole in mind. It is possible that certain criteria may not apply to particular situations which deviate widely from the average. A state may be meeting a certain criterion very effectively and yet receive no credit on the check-lists because the particular situation involved in that individual case is not covered by the check-lists. It is clear that such situations arising from time to time also prevent the use of the self-survey plan as a means of objective comparison between states.

Bibliography of State School Surveys

These are the thirty-five surveys which were analyzed as a basis for the discussion of the survey method in the first part of this Bulletin. The list includes practically all the organized, comprehensive state school surveys that have been published. It does not include routine,

[1] *Op. cit.*, p. 60.

official reports. Nor does it include, as a rule, surveys of some single aspects of state school administration.[1]

Alabama

1. U. S. Department of the Interior, Bureau of Education. *An Educational Study of Alabama.* Bulletin, 1919, No. 41. Washington, D. C.: Government Printing Office, 1919. 522 p.

Arizona

2. U. S. Department of the Interior, Bureau of Education. *Educational Conditions in Arizona.* Bulletin, 1917, No. 44. Washington, D. C.: Government Printing Office, 1918. 200 p.
3. Tupper, C. Ralph. *A Survey of the Arizona Public School System.* Phœnix, Arizona: State Board of Education, 1925. 112 p.

Arkansas

4. U. S. Department of the Interior, Bureau of Education. *The Public School System of Arkansas.* Bulletin, 1923, No. 10. Washington, D. C.: Government Printing Office, 1923. 79 p.

California

5. California Special Legislative Committee on Education. *Report,* As Authorized by Senate Concurrent Resolution, No. 21 by the Forty-third Session of the Legislature of California. Sacramento, Calif.: California State Printing Office, 1920. 96 p.
6. California Commission for the Study of Educational Problems. *Report.* Vols. 1 and 2. Sacramento, Calif.: State Department of Education, 1931. 197 p.

Colorado

7. U. S. Department of the Interior, Bureau of Education. *Report of an Inquiry into the Administration and Support of the Colorado School System.* Bulletin, 1917, No. 5. Washington, D. C.: Government Printing Office, 1917. 93 p.

Delaware

8. General Education Board. *Public Education in Delaware.* New York: General Education Board, 1919. 202 p.

Florida

9. Florida Educational Survey Commission. *Official Report to the Senate and House of Representatives.* Tallahassee, Florida: State of Florida, 1929. 743 p.

Indiana

10. Bachman, Frank P. *Public Education in Indiana.* New York: General Education Board, 1923. 304 p.
11. Indiana Rural Education Survey Committee. *Report.* Indianapolis, Ind.: State Superintendent of Schools, 1926. 130 p.

Kansas

12. State School Code Commission of Kansas. *Report.* Topeka, Kansas: the Commission, 1929. Vol. 1, 88 p.; Vol. 2, 156 p.; Vol. 3, 99 p.

Kentucky

13. Bachman, Frank P. *Public Education in Kentucky.* New York: General Education Board, 1921. 213 p.

Minnesota

14. Foght, H. W. *The Rural School System of Minnesota. A Study in School Efficiency.* U. S. Department of the Interior, Bureau of Education, Bulletin, 1915, No. 20. Washington, D. C.: Government Printing Office, 1915. 56 p.

Mississippi

15. O'Shea, M. V. *A State Educational System at Work.* (Mississippi). Hattiesburg, Miss.: Bernard B. Jones Fund (F. S. Harmon, Treas., Box 477), 1927. 368 p.
16. O'Shea, M. V., director. *Public Education in Mississippi.* Jackson, Miss.: State Department of Education, 1926. 362 p.

Missouri

17. Strayer, Geo. D., and Engelhardt, N. L., directors, Division of Field Studies, Teachers College, Columbia University. "A Preliminary Report of the Survey of Public Schools and Higher Institutions in the State of Missouri." *Eightieth Report of the Public Schools of the State of Missouri,* Parts I-III. Jefferson City, Mo.: State Superintendent of Public Schools, 1929. 464 p.
18. Missouri School Survey Committee. *Facts Concerning Public Education in Missouri.* Supplement to Seventy-fifth Report of the Public Schools of the State of Missouri. Jefferson City, Mo.: State Superintendent of Public Schools, 1924. 139 p.

New Jersey

19. Commission to Survey Public Education. Harlan Updegraff, director. *Report.* Trenton, N. J.: State of New Jersey, 1930. 204 p.

New York

20. Works, George A., and Others. *Rural School Survey of New York State.* Ithaca, N. Y.: Joint Committee on Rural Schools, 1922. 8 Volumes.

North Carolina

21. General Education Board. *Public Education in North Carolina.* Report to Public School Commission of North Carolina. New York: General Education Board, 1921. 137 p.
22. Morrison, Fred W., and Others. *Report on the School System of North Carolina,* I-III.

[1] For a study of state school reports, consult. Shaw, F. L. *State School Reports.* Contributions to Education, No. 242. New York: Teachers College, Columbia University 1926. 142 p.

For a list of state school surveys in special fields, consult: National Education Association, Research Division. *Bibliographies on Eight Problems of School Legislation.* Studies in State Educational Administration, No. 5. Washington, D. C.: the Association, September, 1930. Revisions of this bibliography are to be prepared biennially.

Raleigh, N. C.: State Educational Commission, 1927. 644 p.

23. North Carolina Educational Commission. *Report.* Raleigh, N. C.: State of North Carolina, 1927. 269 p.

Oklahoma

24. U. S. Department of the Interior, Bureau of Education. *Public Education in Oklahoma.* Bulletin, 1923, No. 14. Washington, D. C.: Government Printing Office, 1923. 420 p.

Pennsylvania

25. Pennsylvania Committee on Appropriations and Subsidies, High Schools, Normal Schools, Rural Schools, Teachers' Institutes. *Educational Surveys, 1925.* Harrisburg, Pa.: Department of Public Instruction, 1925. 398 p.

South Dakota

26. U. S. Department of the Interior, Bureau of Education. *The Educational System of South Dakota.* Bulletin, 1918, No. 31. Washington, D. C.: Government Printing Office, 1918. 304 p.

Texas

27. Works, George A., director. *Texas Educational Survey Reports.* Austin, Texas: Texas Educational Survey Commission, 1925. 8 volumes.

Utah

28. U. S. Department of the Interior, Bureau of Education. *Survey of Education in Utah.* Bulletin, 1926, No. 18. Washington, D. C.: Government Printing Office, 1926. 510 p.

Vermont

29. Carnegie Foundation for the Advancement of Teaching. *A Study of Education in Vermont.* Bulletin No. 7, 1914. New York: Carnegie Foundation, 1914. 241 p.

Virginia

30. O'Shea, M. V., director. *Public Education in Virginia.* Report to the Educational Commission of Virginia. Richmond, Va.: Superintendent of Public Printing, 1928. 634 p.

31. Virginia Education Commission and Virginia Survey Staff, Alexander Inglis, director. *Virginia Public Schools,* I-II. Yonkers, N. Y.: World Book Co., 1921. Part I, 400 p.; Part II, 235 p.

Washington

32. Public School Administrative Code Commission of the State of Washington. *Report.* Delivered to the Governor and the Legislature, Jan. 11, 1921. Olympia, Washington: State of Washington, 1921. 117 p.

33. U. S. Department of the Interior, Bureau of Education. *Survey of Educational Institutions of the State of Washington.* Bulletin, 1916, No. 26. Washington, D. C.: Government Printing Office, 1916. 228 p.

West Virginia

34. Cavins, Lorimer V., director. *Survey of Education in West Virginia.* Charleston, W. Va.: State Board of Education, 1928. 4 volumes.

Wyoming

35. Monahan, A. C., and Cook, K. M. *Educational Survey of Wyoming.* U. S. Department of the Interior, Bureau of Education, Bulletin, 1916, No. 29. Washington, D. C.: Government Printing Office, 1916. 120 p.

A survey is a scientific inquiry which obtains facts about the present efficiency of a school system, and on the basis of these facts offers constructive proposals for desirable improvements. . . . Actual administration, supervision, and instruction are professional in character only when they are carried on in the light of such facts and proposals as a survey would provide, and, accordingly, all teachers, supervisors, and administrators must do survey work. This is merely saying that the technique of the survey is essentially a part of the proper technique of administration, supervision, and teaching.—*Jesse B. Sears, The School Survey.*

State-Wide Achievement Testing Programs

The standardized objective test of achievement is by far the most widely used method which undertakes to measure directly any phase of the product of state school systems. Other methods collect data on factors which are believed to bear a close relationship to school efficiency; for example, school costs, length of session, the holding power of the schools, the training of teachers, etc., but the objective test secures data on actual scholastic achievement. The reliability of this procedure as a measure of school efficiency obviously depends on the validity, reliability, and objectivity of the tests themselves; the care with which they are administered; the extent to which all educational outcomes are covered by the tests used; and the correct interpretation of the data procured.

The Achievement Test in State-Wide Surveys

State-wide testing programs were carried on by thirteen of the thirty-five state school surveys analyzed for the purpose of this study. The extent of the program ranged from tests in a few tool subjects in some of the surveys to the concentration of all the time and effort of the survey staff on a rather complete state-wide testing program. The state surveys including achievement testing among their procedures are those of: Arizona, Arkansas, Florida, Indiana, Kentucky, Mississippi, New York, North Carolina, Oklahoma, Texas, Utah, Virginia, and West Virginia.

The advantages and limitations of the achievement test with respect to its use in school surveys are summed up by the New York Rural School Survey report:

> The advantage of such standardized tests is that they give objective results which are uninfluenced by the personal judgment of individual observers. Such results lack concreteness, picturesqueness, and the lively sense of reality inherent in the direct observation of pupils in action, but they are objectively statable in mathematical terms and thus aid greatly in the objective evaluation of the school system.[1]

A brief description is given below of extensive testing programs reported in state school surveys. The summaries include a review of the methods of sampling used, the administrative procedure followed in giving the tests, and the school subjects covered.

Mississippi. The Mississippi survey was confined to the problem of securing "precise data relating to the intellectual status and educational achievement of pupils in the elementary and high schools and of students in the freshman year of college."[2] In order to obtain such data, achievement and intelligence tests were administered to 14,480 white and 3,439 negro pupils in grades one to eight; 10,075 white and 1,591 negro high-school students; and 1,667 white and 55 negro freshmen college students.

The tests used were selected according to four criteria: (1) validity, (2) reliability, (3) comprehensiveness, and (4) administrative feasibility.

For the purpose of applying the tests to a random sampling of pupils, and also for administrative convenience, the state was divided into five sections, with one of the investigators in charge of the work done in each section. In addition to the studies made from these five centers, several independent investigations were made in the larger cities of Mississippi.

The data thus secured were used not only to determine the intellectual and educational status of the pupils tested, but were applied to such problems as the classification of pupils on the basis of mental maturity and ability, race and sex differences in intelligence and achievement, sectional and community differences in educational achievement, the relation of achievement to ability, and the overlapping in achievement of high-school seniors and college freshmen.[3]

West Virginia. An extensive testing program was also given a prominent place in the West Virginia survey. The first step in the program was to divide the state into "zones" following natural geographic and industrial lines. These zones included the eastern mountain region, the southern coal section, the Ohio Valley section, the northern coal section, and the northern manufacturing section. To assure an equal representation in the survey, the percent of total population living in each

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[1] Works, Geo. A., and Others. *Rural School Survey of New York State.* Vol. 6. Ithaca, N. Y.: Joint Committee on Rural Schools, 1922. p. 14.

[2] O'Shea, M. V. *A State Educational System at Work.* (Mississippi). Hattiesburg, Miss.: Bernard B. Jones Fund (F. S. Harmon, Treas., Box 477), 1927. Title page.

[3] *Ibid.*, digest of volume.

zone was computed. One reason for thus dividing the state into zones was to secure a fair representation of all interests and sections of the state; another was to measure the efficiency of districts typical of a particular kind of organization or school situation. "For example, certain districts were selected because they are exceedingly wealthy, others because they are extremely poor; some districts were selected because they have a high degree of consolidation, others because they have a large number of one-room schools; some districts were chosen that have a high percent of daily attendance; others in which the attendance is as low as 50 percent; again, some districts were chosen because of the superior training of their teachers, others because of their poorly qualified teachers." [1] Of the schools included in the sampling, 690 were the one-room type; 118, the two-room; 97, the three-or-more-room; and 22, high schools. Both white and colored schools were included.

Ten tests were selected on the basis of validity, ease of administration, and the amount of comparative data that could be obtained from surveys of similar character. Intelligence tests adapted to the various levels of mental ability to be tested were given in grades one to twelve. An achievement test which is a collection of nine separate tests, covering reading, arithmetic, nature study and science, history and literature and language was given in the elementary grades, and a test covering English, mathematics, science and history and the social sciences was given to high-school students. These tests were given to a total of 19,847 pupils in grades one to twelve.

Although the program called for the visitation of approximately 1,200 schoolrooms housed in about 900 separate school buildings, practically all tests were given during the second and third weeks of October. This was made possible through the cooperation of local teachers and school administrators. In order to insure uniformity in the training of the various testing crews a complete manual of directions was prepared by the central office of the survey staff. This manual explained the procedure to be followed in administering the tests and gave suggestions regarding the training of assistants.

The careful sampling plan made it possible to apply effectively the results of the tests. The results of the tests in larger and smaller school organizations were compared; racial differences in intelligence and achievement were noted; and the findings on the achievement tests were also applied to such administrative problems as teachers' salaries, length of term, attendance, supervision, and type of district organization.[2]

New York. The Division of Tests and Measurements of the Joint Committee on Rural Schools made definite inquiry into the product of the rural schools of New York State. Generally, the method of direct personal observation was employed, but this was supplemented by achievement tests on the school subjects. For the purpose of the survey the state was divided into seven sections on a geographic, economic, and social basis. It was the intention thus to secure "a fair and accurate picture of prevailing conditions throughout the state." More than 5,000 children were tested in grades one to four; 6,000 in grades five to eight; and 2,500 in grades nine to twelve. In all, about 14,000 pupils in 441 schools were examined. Tests on the various school subjects were given in different schools, the program varying with the school situation, but a test in silent reading was given to all pupils tested.[3]

Texas. Tests of both intelligence and achievement were administered in the Texas survey. The largest number of pupils was tested in reading—a total of 8,562 white and 400 colored children in grades three to seven, and 3,965 white and 254 colored high-school students in grades eight to eleven, inclusive. The "commissioner's precinct" was taken as the geographical unit of testing in the rural sections. The state was divided into seven regions: the timbered region, the blackland, "cross timbers," Central West, Plains (Anglo-Saxon), Southern (Mexican and American), and Central (European). Some testing was done in the larger cities of Texas for comparison with the data secured from rural schools.

The plan called for testing all negro schools in the areas chosen for testing. A special investigation was made of the colored and of the Mexican school children relative to mental ability as measured by a non-verbal test. Assistants were trained to give the tests and these cooperated with the survey staff. An Examiners' Manual served as a guide.

The data obtained from the tests were applied to such administrative problems as the size of the school in relation to efficiency, selection as a factor in the relative efficiency of small and large rural schools, the relation of the length of the school year to achievement, and similar problems.[4]

State Testing Programs

Several states have adopted the plan of giving standardized tests at regular intervals in the schools of the state as a means of evaluating the school product. A few such programs are described below:

Delaware.[5] Testing programs were administered in 1926-27 in all the white and colored schools of the state. The tests were given in grades two to

[1] Cavins, L. V., director. *Survey of Education in West Virginia.* Vol. 2. Charleston, W. Va.: State Board of Education, 1928. p. 4.

[2] *Ibid.*, digest of volume.

[3] Works, Geo. A. and Others. *Rural School Survey of New York State.* Vol. 6. Ithaca, N. Y.: Joint Committee on Rural Schools, 1922. 223 p.

[4] Works, Geo. A., director. *Texas Educational Survey Report.* Vol. 4. Austin, Texas: Texas Educational Survey Commission, 1925. 233 p.

[5] Delaware. *Annual Reports of the Department of Public Instruction for the Years Ending June 30, 1927, and June 30, 1929.* Dover, Del.: State Board of Education, 1927, 1929. p. 117-38, and 129-49.

eight in January and in April. The purpose was the improvement of instruction by:

"(1) Diagnosing individual differences,
(2) Measuring result of teaching and the improving of teaching methods,
(3) Classification of pupils according to educational achievements,
(4) Comparison of individual results with standard, grade with grade, school with school,
(5) Using results as a factor in classification and promotion of children."

Tests were given in the elementary schools in reading, spelling, history, geography, and arithmetic. The same tests in reading and spelling had been given in each of the three preceding years.

In May, 1927, standard tests were given in high school in spelling, reading, arithmetic, biology, general science, civics, chemistry, physics, stenography, bookkeeping, French, and Latin.

Practically the same testing program was carried out in 1928-29.

Florida.[1] Members of the Division of Elementary Supervision have given standards tests to the elementary schools, and have trained teachers to administer them. "The purposes in giving these tests were: (a) to demonstrate the results to be secured from giving standard tests, and (b) to familiarize teachers and others with the procedure of giving and scoring the tests."

The following is a statement of the extent of this activity:

	1926-27	1927-28	Both
Schools giving reading tests...	139	203	342
Schools giving spelling tests..	41	9	50
Schools giving arithmetic tests.	6	3	9
Schools giving English tests..	0	42	42

Maryland.[2] The State Department of Education does not give standardized tests every year in all subjects. In 1924 tests were given in reading and arithmetic only. No state-wide standard tests were given during 1925-26, but the State Department prepared an annotated list of standard tests which was sent to the counties in the fall with the suggestion that the counties select those best suited to their plans. Six counties cooperated in testing pupils in grades seven, eight, and nine. The supervisors in twenty counties gave information concerning the tests used, in their annual reports to the State Superintendent. The tests given were in reading, English, arithmetic, American history, geography, and handwriting. Several intelligence tests were also given.

In 1927-28 pupils in grades two to seven throughout the state were tested in reading and English in October and May. Pupils in grades four to seven throughout the state were tested in history in May.

In 1928-29 standard tests were given in every county in Maryland except Baltimore. The purposes of the tests were diagnostic and to provide for remedial work. Tests were given in the elementary schools in mental capacity. Achievement tests were given in the following subjects: reading and literature, English, geography, arithmetic, and history. Appropriate tests were given each grade in all subjects covered by that grade. The counties which did not have their schools at standard or above in reading in 1927-28 were asked by the State Department of Education to give re-tests in the spring of 1929.

In October, 1928, and in April, 1929, practically all high school pupils were given diagnostic tests in English composition. Approximately 40,000 pupils were tested.

Virginia.[3] Over 50,000 pupils were tested in school achievement and mental ability in eighty-five counties in 1929-30. The tests administered were suitable for grades four to nine, but testing was emphasized in the sixth grade. Data were also collected concerning the teachers of the pupils tested, since the plan is to relate the data secured in the tests to the experience and certificate of the teacher; also to other factors related to school efficiency such as length of school term and size of school. The school officials of Virginia expect, with the aid of these cumulative records, that educational standards, methods, and facilities can be studied "under natural field conditions."

Washington.[4] During 1927-28 the eighth grade examination questions were changed from the essay to the objective type. In response to requests for measurements of pupils prior to the eighth grade final examination, a test in arithmetic for grades four to eight, inclusive, was prepared and sent to county superintendents for use, September, 1927. The aim of this test was to give a common measure in arithmetic and to diagnose the difficulties of individual pupils. It also provides a means of comparing individual schools with the county or state as a whole. The Stanford Achievement Tests were also given throughout the state in grades four to eight inclusive in schools of every type and in all parts of the state. The chief purpose of this study of achievement was said to be diagnostic.

Wyoming.[5] Rural schools were visited for the purpose of making mental and educational surveys. Handicapped children were detected by means of the tests given in these surveys. The extent of their defects was ascertained, and provision made for exclusion from school, removal to an institution, or for their training in the local school. The results of these surveys also serve as a basis for educational guidance including preventive and remedial work and better classification of pupils.

[1] Florida. *Biennial Report of the Superintendent of Public Instruction for the Year Ending June 30, 1928.* Tallahassee, Fla.: State Superintendent of Public Instruction, 1928. p. 83.

[2] Maryland. *Sixtieth, Sixty-second, and Sixty-third Annual Reports of the State Board of Education for the Years 1926, 1928, and 1929.* Baltimore, Md.: State Department of Education, 1927, 1929, and 1930. p. 77-79, 11-23, 44-48.

[3] Virginia. *Annual Report of the Superintendent of Public Instruction of the Commonwealth of Virginia with Accompanying Documents, 1929-30.* Richmond, Va.: Division of Purchase and Printing, 1930. p. 86.

[4] Washington. *Twenty-ninth Biennial Report of the Superintendent of Public Instruction for the Biennium Ending June 30, 1928.* Olympia, Wash.: Superintendent of Public Instruction, 1928. p. 33.

[5] Wyoming. *Biennial Report of the State Department of Education of Wyoming for 1929-30.* Sheridan, Wyo.: Mills Company, 1930. p. 66-73.

In addition to mental and educational measurements made in rural schools, a reading survey was conducted in the fall of 1928 and in the spring of 1929. Gates Diagnostic Reading Tests were given to 10,183 pupils in 1928-29. This survey was conducted by the County Superintendents' Association. The teachers were supplied with the testing material and instructions for administering them, by the county superintendents. After the tests were given by the teachers the papers were returned to the county superintendents to be scored. A copy of the results was given to each teacher, with recommendations for the improvement of reading.

In the cities of Wyoming intelligence and achievement tests were used for the purpose of homogeneous classification, promotion, diagnosis of educational deficiences, improvement of instruction, and comparison of teaching methods. Nineteen thousand four hundred seventy-six children were tested in the cities of Wyoming by the use of 1,872 individual mental measurements, 11,263 group-mental measurements, and 13,019 educational tests, making a total of 26,154 mental and educational measurements.

The value of regularly evaluating the work of a state school system by means of direct measurement is readily apparent. A continuous testing program yields comparative data which enable a school system to keep informed of certain phases of its educational achievement at all times. At the same time, it must be recognized that many of the most desirable results of education, such as the development of standards and ideals of conduct, the effect of training on the emotions, the building of desirable attitudes, and other attributes which go to make up the sum total of personality, have not yet been scientifically measured.

Selected Bibliography on Extensive State Testing Programs

1. BACHMAN, FRANK P. *Public Education in Indiana.* New York: General Education Board, 1923. 304 p.

   Chapter one gives an account of the measurement of pupil progress in elementary schools by means of standardized tests in reading, spelling, arithmetic, and history. These tests were given to 15,691 pupils located in 10 cities.

2. BACHMAN, FRANK P. *Public Education in Kentucky.* New York: General Education Board, 1921. 213 p.

   In all, 16,700 pupils were given examinations. In the elementary schools tests were given in reading, spelling, arithmetic, and history. High school pupils were tested in reading and algebra.

3. CAVINS, LORIMER V., director. *Survey of Education in West Virginia,* Vol. 2. Charleston, W. Va.: State Board of Education, 1928. 160 p.

   Gives plan and scope of the testing program, the names of the tests used, and the results of their application to approximately 30,000 pupils.

4. CLIFTON, J. L., and WOOD, E. R. *Report of the December 2, 1930 'Every Pupil Test'.* Columbus, Ohio: F. J. Heer Printing Co., 1931. 55 p.

   An account of a state-wide testing program in which achievement tests were given in grades and high schools to several thousand pupils.

5. COLVIN, STEPHEN S., and MCPHAIL, A. H. *Intelligence of Seniors in the High Schools of Massachusetts.* U. S. Department of the Interior, Bureau of Education, Bulletin, 1924, No. 9. Washington, D. C.: Government Printing Office, 1924. 39 p.

   A mental survey was given to 3,333 senior students in Massachusetts high schools during December, 1922 and January, 1923. A questionnaire supplemented the results of the testing.

6. *Comparative Results of a State-Wide Use of Standard Tests and Measurements* No. 158. Extension Series No. 29. Chapel Hill, N. C.: University of North Carolina, 1918. 24 p.

   Report of a cooperative research plan for devising tentative state standards for the use of certain educational tests and measurements. Tests given in October and May in all eight grades.

7. COVERT, TIMON. *Educational Achievements in One-Teacher and Larger Schools.* U. S. Department of the Interior, Bureau of Education, Bulletin, 1928, No. 15. Washington, D. C.: Government Printing Office, 1928. 23 p.

   Summarizes the results of a number of testing programs given in large and small schools.

8. CRAM, FRED D. "Tests and Measurements in Rural Schools—Tentative Conclusions from the Special Investigation Being Carried on for the Committee on Rural Education." *Proceedings, 1921.* Vol. 59. National Education Association. Washington, D. C.: the Association, 1921. p. 357-62.

   Report of procedure followed and tentative conclusions reached in extensive testing program in one-teacher rural schools.

9. CRAM, FRED D. "Tests and Measurements in Rural Schools." *Proceedings, 1923.* Vol. 61. National Education Association. Washington, D. C.: the Association, 1923. p. 322-45.

   Gives detailed account of a testing program designed to include a "sample" of rural schools in the United States.

10. DELAWARE. *Annual Reports of the Department of Public Instruction for the Years Ending June 30, 1927 and June 30, 1929.* Dover, Delaware: State Board of Education, 1927, 1929. p. 117-38, and 129-49.

    State-wide testing programs are administered in Delaware. According to the above reports, the purpose of these tests in elementary and high school subjects is the improvement of instruction by: (1) diagnosing individual differences, (2) measuring the results of teaching, (3) classification of pupils, (4) comparison of individual results with standard, (5) using results as a factor in classification and promotion of pupils.

11. EELLS, W. C. "Use of Standard Tests in 72 Published School Surveys." *School Life* 14: 168-69; May, 1929.

Report of the analysis of 72 school surveys (1914-1928) using standardized tests. The subjects tested most frequently and the tests used for each are given. A comparison is made between the frequency of use of certain tests in these surveys and their rating by experts.

12. FLORIDA. *Biennial Report of the Superintendent of Public Instruction for the Year Ending June 30, 1928.* Tallahassee, Fla.: State Department of Public Instruction, 1928. p. 83.

In 1927-28 tests were given in the elementary schools in reading, spelling, arithmetic, and English. This testing program was administered under the direction of the Division of Elementary Supervision.

13. FLORIDA EDUCATIONAL SURVEY COMMISSION. *Official Report to the Senate and House of Representatives.* Tallahassee, Fla.: State of Florida, April, 1929. 743 p.

A number of elementary and high schools were selected for testing. Tests were given in reading, spelling, composition, writing, and mental ability in the grades, and content examinations together with tests covering industrial arts, music, and mental ability were given in the high schools.

14. GERBERICH, J. R., and STODDARD, G. D. "Personnel Survey of 10,000 Iowa High School Seniors." *School and Society* 30: 515-20; October 12, 1929.

This high-school testing program was inaugurated in 1923 and has been given annually to an average of more than 1,700 Iowa high school seniors since that year. The survey has had as its objective the use of a mental-educational test battery in the senior year of high school as a foundation for educational and vocational guidance. More specifically the aims have been: (1) the determination of the selective factors in operation between high-school graduation and college entrance; (2) the discovery of the gifted high-school graduate; (3) the determination of the degree to which tests can be used in predicting scholastic success in college.

15. GREGORY, C. A. *The Efficiency of Oregon School Children in the Tool Subjects as Shown by Standard Tests,* Vol. 1. Eugene, Oregon: University of Oregon, 1919.

An extensive testing program carried out in the schools of Oregon, including city, village and rural schools. Tests were given in arithmetic, language and grammar, spelling, reading, and handwriting.

16. HAGGERTY, M. E. "Educational Achievement." *Rural School Survey of New York State,* George A. Works, director. Ithaca, N. Y.: Joint Committee on Rural Schools, 1922. 223 p.

Approximately 14,000 pupils in 441 schools were given objective standardized tests of intelligence and achievement. The latter included reading, American history, spelling, arithmetic, algebra, and Latin.

17. INGLIS, ALEXANDER, director, Educational Survey Commission. *Virginia Public Schools,* Part II. Yonkers, N. Y.: World Book Co., 1921. 235 p.

Standardized tests of intelligence and achievement were used in this survey. The latter included reading, spelling, writing, arithmetic, composition, and algebra. A summary of results is given with recommendations referring especially to factors influencing efficiency as term length, trained teachers, uniform standards of achievement, supervision, attendance, and other factors.

18. KANSAS STATE SCHOOL CODE COMMISSION, SURVEY COMMITTEE. *The Results of Instruction in Different Types of Elementary Schools in the State of Kansas.* Pittsburg, Kansas: Kansas State Teachers College Press, 1922. 45 p.

Four thousand two hundred forty-four pupils located in fifteen cities and seventeen counties participated in this testing program.

19. MADSEN, I. N. "Some Results from a Testing Program in Idaho." *School and Society* 13: 668-71; June, 1921.

Reports results of extensive testing programs carried on for several years. Mental and educational tests were given to several thousands of pupils in both rural and city schools.

20. MARYLAND. *Sixtieth, Sixty-second, and Sixty-third Annual Reports of the State Board of Education for the Years 1926, 1928, and 1929.* Baltimore, Md.: State Department of Education, 1927, 1929, and 1930. p. 77-79, 11-23, 44-48.

For some years Maryland has undertaken extensive testing programs. In 1928-29 standard tests were given in every county except Baltimore. The purposes of these tests are diagnostic and provide for remedial work.

21. MORRISON, J. CAYCE. *Some Administrative Uses Made of Standard Tests and Scales in the State of New York, 1921-22.* University of the State of New York, Bulletin, No. 772. Albany, N. Y.: University of the State of New York Press, 1923. 37 p.

Sixty-one city and village superintendents and 102 district superintendents reported that they had used standard tests and scales during the year, using 70 different tests. Two hundred fifty thousand children were tested.

22. NORTH CAROLINA EDUCATIONAL COMMISSION. *Public Education in North Carolina.* New York: General Education Board, 1921. 137 p.

Standardized achievement tests were given in reading, spelling, arithmetic, history, algebra, and Latin. More than 10,000 children in various counties and cities were tested.

23. NORTH DAKOTA. *Twentieth Biennial Report of the Superintendent of Public Instruction for the Period Ending June 30, 1928.* Bismark, N. Dakota: Department of Public Instruction, 1928. p. 40-77.

Reports a state-wide survey in the minimum essentials of English. Fourteen thousand one hundred twenty-six pupils in 442 public schools of all classes and from every county were in-

cluded in this testing program. In addition, 409 pupils from private and parochial schools participated.

24. ODELL, CHARLES W. *Conservation of Intelligence in Illinois High Schools.* Bureau of Educational Research Bulletin, No. 25. Urbana, Ill.: University of Illinois, 1929. 58 p.

The writer analyzed the educational status of 12,300 seniors from 368 Illinois high schools. The testing program was supplemented by a questionnaire.

25. OKLAHOMA EDUCATIONAL SURVEY COMMISSION. *Public Education in Oklahoma.* U. S. Department of the Interior, Bureau of Education, Bulletin, 1923, No. 14. Washington, D. C.: Government Printing Office, 1923. 420 p.

Twenty-six thousand eight hundred forty-five pupils were tested in all types of public schools and in all sections of the state.

26. O'SHEA, M. V. *A State Educational System at Work.* (Mississippi). Hattiesburg, Miss.: Bernard B. Jones Fund (F. S. Harmon, Treas., Box 477), 1927. 368 p.

The scope and character of the measurement program are treated in Part I. Gives a detailed account of the organization of the measurement program, the selection of tests to be used and methods employed to secure adequacy and accuracy.

27. RAINEY, HOMER P. *A Survey of the Achievement of Oregon Pupils in the Fundamental School Subjects.* Education Series, Vol. 1, No. 3. Eugene, Oregon: University of Oregon, 1927. 168 p.

An objective survey of the achievements of 1,049 Oregon school children, representing schools of various sizes.

28. REINOEHL, CHARLES M. "A Study of Instruction in Montana Rural Schools." *Montana Education* 17: 197-98; January, 1922.

Summarizes results of standardized educational tests reported by 11 consolidated and 34 one-teacher schools. Of 42 corresponding median scores for six grades in each subject, 83 percent are favorable to the consolidated schools.

29. REYNOLDS, ANNIE. *Supervision and Rural School Improvement.* U. S. Department of the Interior, Office of Education, Bulletin, 1930, No. 31. Washington, D. C.: Government Printing Office, 1930. p. 18-21.

Gives an account of experiments made in South Dakota, Indiana, Michigan, and North Carolina which attempted to measure the results of supervision by means of objective achievement tests given to pupils.

30. STEVENSON, P. R. "Report of the State-Wide Testing Project in Plane Geography." *Educational Research Bulletin* 2: 118-19, 128; April 18, 1923.

An account of a state-wide test in geography in which 50,000 children participated.

31. TUPPER, C. RALPH. *A Survey of the Arizona Public School System.* Phoenix, Arizona. State Board of Education, 1925. 112 p.

Intelligence and achievement tests were given in grades one, five, and eight and in the high schools of Arizona.

32. U. S. DEPARTMENT OF THE INTERIOR, BUREAU OF EDUCATION. *Survey of Education in Utah.* Bulletin, 1926, No. 18. Washington, D. C.: Government Printing Office, 1926. 510 p.

Pupil achievement in the elementary schools was measured by means of standardized tests of both mental and educational ability. Three thousand four hundred and fourteen pupils took the combined tests. Tests of achievement and intelligence were also administered in ten senior and eight junior high schools.

33. U. S. DEPARTMENT OF THE INTERIOR, BUREAU OF EDUCATION. *The Public School System of Arkansas.* Bulletin, 1923, No. 10. Washington, D. C.: Government Printing Office, 1923. 79 p.

In all, 3,824 pupils were tested, of whom 1,403 were in one-teacher schools and 2,421 in rural schools having more than one teacher.

34. VAN WAGENEN, M. J. *Comparative Achievement in Rural, Town, and City Schools.* Minneapolis, Minn.: University of Minnesota Press, 1929. 144 p.

More than 150 town and city school systems and over a thousand rural schools scattered throughout nearly every county in the state cooperated in this project. The major problem involved was to determine the success of two outstanding policies of the State Department of Education: (1) the advocacy of an increase in the length of the school years from 7 to 9 months for rural schools, and (2) the encouragement of consolidation of small rural schools.

35. VIRGINIA. *Annual Reports of the Superintendent of Public Instruction of the Commonwealth of Virginia with Accompanying Documents, for the Years 1927-28, 1929-30.* Richmond, Va.: Division of Purchase and Printing, 1928, 1930. 136 p., 189 p.

In 1929-30 over 50,000 pupils were tested in school achievement and mental ability in 85 counties in the fall of 1929 and again in the spring of 1930. Plans have been made to use the data from these tests to study the effect upon pupil learning of: (1) length of term, (2) size of school, (3) certificate of teacher, and (4) experience of teacher.

36. WASHINGTON. *Twenty-ninth Biennial Report of the Superintendent of Public Instruction for the Biennium Ending June 30, 1928.* Olympia, Wash.: State Department of Education, 1928. 203 p.

During 1927-28 the eighth grade examination questions were changed from the essay to the objective type; also comprehensive achievement tests were given throughout the state in grades four to eight in schools of every type.

37. WISCONSIN. "Education in Wisconsin." *Biennial Report, 1924-26, of the State Superintendent of Public Instruction.* Madison, Wis.: State Department of Public Instruction, 1926. 220 p.

Chapter eight gives a full account of the testing program formulated and administered by

the Division of Tests and Measurements. Intelligence tests and achievement tests in reading, arithmetic, language, grammar, spelling, geography, and history were used extensively. A study of children's interests was included in the program.

38. WOODY, CLIFFORD. *Achievement in Ninth-Grade English in Various High Schools of Michigan. Results of the May Testing Programs. Report of the Testing Program for October, 1931.* Bureau of Educational Reference and Research, Bulletins No. 67, 140, 142. Ann Arbor, Mich.: University of Michigan, 1924, 1931.

Reports on testing programs carried on in elementary and secondary schools throughout Michigan.

39. WORKS, GEORGE A., director. *Texas Educational Survey Report,* Vol. 4. Austin, Texas: Texas Educational Survey Commission, 1925. 233 p.

Gives detailed account of the testing program carried out in connection with this survey. Intelligence and achievement tests were given in all grades.

40. WYOMING. *Biennial Report of the State Department of Education of Wyoming for 1928-30.* Sheridan, Wyoming: Mills Company, 1930. p. 66-73.

Both rural and city schools were given mental and achievement tests. The results of these tests aided in the detection of handicapped children who needed special provisions for their education. These tests, also, served as a basis for educational guidance, including preventive and remedial work and better classification of pupils.

Tests will not replace skill, they will not replace tact, they will not replace kindness, they will not replace enthusiasm, or nobility. On the other hand, they will not in any sense harm us, and they will be useful as helps, no matter how ideal our aims. Our ideals may be as lofty and subtle as you please, but if they are real ideals, they are ideals for achieving something; and if anything real is achieved it can be measured. Not perhaps now, and not perhaps in fifty years from now; but if a thing exists, it exists in some amount; and if it exists in some amount, it can be measured.—*E. L. Thorndike.*

Statistical Analyses of State School Systems

Statistical analysis of state school efficiency is defined as the direct measurement or counting of quantitative facts. It usually involves also the combination of these facts into a single index or estimate of efficiency. It deals with such factors as: average number of days schools are in session, per capita cost of education, average daily teaching load, and similar items. When such a criterion is applied to a given state school system, the response is always a numerical expression — two hundred days, eighty-three dollars, one hundred pupil-clock-hours, and so on. A dozen different statistical indexes have been made in this field and these are summarized in this section.

Indexes of State School Efficiency

Comprehensive rating of the state school systems on quantitative standards was first attempted by Ayres in 1912.[1] This little-known pioneer investigation was followed eight years later by his index number for state school systems,[2] which immediately attracted national attention. In this second index Ayres selected 10 sets of statistical data which, he believed, reflected educational conditions. Five of these items were concerned with attendance and enrolment; five were concerned with financial matters. These 10 sets of data were then averaged and the states arranged in order according to this average. Indexes were computed for every year from 1871 to 1918 for the United States as a whole. For each of the individual states the computations were made for 1890, 1900, 1910, 1916, and 1918. In evaluating the results of his work, Ayres[3] made this significant comment:

> If some great national agency were to undertake a survey of each of the 48 state school systems, it would surely report on many phases of their work not included in the items of the index. Among such phases would be the legal bases of the system, its organization, professional leadership and supervision, business management, course of study, teaching staff, plant and equipment, and the results of standard tests of classroom work.

Although the limitations of the index were thus frankly recognized by its author, the study, on the whole, had a tonic effect on state school leadership. States which were ranked high were urged to maintain their positions of leadership. States in the lower ranges were urged to make a better record in the future. The Ayres Index is still used from time to time in the official school reports of several states.[4]

At the same time, the Ayres study was not received with unanimous approval. The index method itself was not generally questioned, but new attempts at ranking were usually made by weighting certain of the Ayres items, or by omitting certain items, or by adding new ones. Myers,[5] Blair,[6] Brooks,[7] and others have objected to the implications of the Ayres Index on the ground that it combined unlike denominations, that it measured quantity of instruction and omitted the quality, that certain of the items were not significant, that it did not apply well to states with large private school enrolments, and that high rank on the financial items might mean either educational efficiency or fiscal inefficiency. Some of the criticisms directed against the Ayres Index arose from failure to understand its meaning and to use it as the author intended. In other cases the incautious statements of over-enthusiastic champions of the Index increased the skepticism with which it was received. On the whole, however, the criticisms made were justified although they frequently indicated weaknesses which Ayres himself fully recognized.

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[1] Ayres, Leonard P. *A Comparative Study of the Public School Systems in the Forty-Eight States*. New York: Russell Sage Foundation, 1912. 33 p.

[2] Ayres, Leonard P. *An Index Number for State School Systems*. New York: Russell Sage Foundation, 1920. 70 p.

[3] *Ibid.*, p. 58.

[4] See, for example: Maryland, State Board of Education. *Sixty-third Annual Report, Year Ending July 31, 1929*. Baltimore, Md.: Maryland State Department of Education, 1929. p. 276-79.

[5] Myers, Charles Everett. "Educational Ranking of States." *Pennsylvania School Journal* 75: 237-40; December, 1926.

[6] Illinois, State Superintendent of Public Instruction. *Educational Press Bulletin*, Nos. 252, 253; February, March, 1930, and No. 273; March, 1932.

[7] Brooks, E. C. "The Taxpayer's Idea of School Business Administration." *School Executives Magazine* 49: 553-55; August, 1930.

Criticisms of the Ayres Index were summarized in 1924 by Frank M. Phillips, then Chief of the Statistics Division of the U. S. Office of Education.[1] Phillips made, in addition, two important adaptations of the Ayres Index: (1) the financial items were revised to allow for the decreased purchasing power of the dollar, and (2) the states were classified into urban, mixed, and rural types to make possible the comparison of ranks among states of similar population characteristics. In addition, a method of ranks based on different statistical factors was suggested to supplement the index method as evolved by Ayres. In the Phillips' rank method ten items were used. The number of general financial items was reduced from five to two, and statistics concerning illiteracy, teachers' salaries, and teacher training were substituted for the three financial items which were discarded. The attendance and enrolment items were also modified considerably.

In 1926 Schrammel,[2] in the course of an investigation of the effectiveness of certain types of state educational organization, found it advisable to rank the states according to their general educational efficiency. He departed from the precedent of ten-point ratings as established by Ayres and followed by Phillips and used the average of eleven statistical items. Three of his factors dealt with school finance, two with literacy, and the remaining six with enrolment and attendance statistics. In spite of these differences he found a close relationship between his own ranking of the states and that calculated by Ayres.[3]

Indexes of City and County School Efficiency

Paralleling the work of Ayres, Phillips, and Schrammel in the field of state school administration, a series of attempts have been made to find a quantitative basis for evaluating city and county school efficiency. Since many of these attempts might well be applied to states, a few of them will be described at this point.

A study of the effects of fiscal independence of city boards of education led Frasier[4] to attempt an evaluation of the efficiency of 169 city school systems on a quantitative basis. He made use of six statistical items which he combined into a single rating by a method based on standard deviations.[5] Harrell[6] has proposed a tentative measure of city school efficiency based on the average of eleven statistical items. These include factors of class size and the supervisory program which are seldom represented in ratings of this kind. Still another attempt to rate cities and towns was made in 1927 by Thompson of the Connecticut State Board of Education, Division of Research and Surveys.[7] This study, being applied to only one state, admitted many refinements in the basic statistics which are seldom possible when cities in different states are compared. Another important new feature of the Connecticut rating is the use of the standard score technic[8] in combining the eight items chosen into a single measure.

The rating of county systems has also been attempted many times. A large number of these studies have consisted simply of the application of the Ayres Index to the counties of a state. However, several investigators have used other combinations of statistical data, or have used one or more of the Ayres factors combined with other data.

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[1] Phillips, Frank M. "Educational Ranking of States by Two Methods." *American School Board Journal* 69: 47-49; December, 1924.
As this Bulletin goes to press, a 1930 revision of both the Ayres and Phillips ratings is being published. See: Phillips, Frank M. "Educational Rank of States, 1930." *American School Board Journal* 84: 25-29; February, 1932, and subsequent issues.

[2] Schrammel, Henry E. *The Organization of State Departments of Education*. Ohio State University Studies, Bureau of Educational Monographs, No. 6. Columbus, Ohio: the Ohio State University Press, 1926. Chapter 9.

[3] Correlations by the rank-difference method ranged from .62 to .78. See: Schrammel, *op. cit.*, p. 128.

[4] Frasier, G. W. *The Control of City School Finances*. Milwaukee, Wis.: Bruce Publishing Co., 1922. 132 p. This index was later used by the Educational Finance Inquiry. See: McGaughy, J. R. *The Fiscal Administration of City School Systems*. New York: Macmillan Co., 1924. p. 47-54.

[5] The method is fully described in Chapter VII of Frasier's study.

[6] New York Tax Commission. *Fiscal Problems of City School Adminisiration*. Report by the Special Joint Committee on Taxation and Retrenchment. Legislative Document, 1928, No. 66. Albany, N. Y.: State of New York, 1928. p. 65-7. The same factors are listed in: Englehardt, N. L., and Alexander, Carter. *School Finance and Business Management Problems*. New York: Teachers College, Columbia University, 1928. p. 7-9.

[7] Connecticut State Board of Education, Division of Research and Surveys. *Tentative Index Number for the Schools of Connecticut Cities and Towns*. Hartford, Conn.: State Board of Education. Mimeographed, 12 p.

[8] This technic is not described in the study itself but can be found in: McCall, William A. *How to Experiment in Education*. New York: Macmillan Co., 1923. p. 98-102.

TABLE 5.—STATISTICAL FACTORS USED IN INDEXES OF SCHOOL EFFICIENCY[1]

Factor	State ratings					City ratings			County ratings				Number of times factor is used
	Ayres	Phillips	Schrammel	Witham	Sias	Frasier	Harrell	Thompson	Grimm	Combs	Wiley	Brown	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Number of Factors Used	10	10	11	1	1	6	11	8	6	12	12	13	
Attendance													
1. Percent of school population attending school daily	x	x	x							x		x	5
2. Average days attended by each child of school age	x				x							x	3
3. Average number of days schools were kept open	x	x	x						x	x	x	x	7
4. Percent high school attendance was of total attendance	x											x	2
5. Average days attended by each child enrolled		x											1
6. Percent of enrolment in average daily attendance							x	x			x		3
Enrolment													
1. Percent that boys were of girls in high school	x											x	2
2. Percent of total enrolment found in high school		x	x				x		x	x			5
3. Percent of total population enrolled in public elementary and secondary schools			x										1
4. Percent of school population enrolled in public elementary and secondary schools			x					x					2
5. Percent of those enrolled who graduate from public high school			x				x						2
6. Percent of 16 and 17 year old children in school						x							1
7. Percent of those enrolled who graduate from elementary schools							x						1
8. Percent that average daily attendance in high school is of total average daily attendance								x					1
9. Distribution of enrolment through the grades				x									1
Teacher Training													
1. Ratio of students preparing to teach to teaching positions		x											1
2. Percent of teachers who have 6 or more years training above 8th grade						x			x				2
3. Percent of elementary teachers holding certificates above the minimum requirements							x						1
4. Percent of secondary teachers holding certificates above the minimum requirements							x						1
5. Percent of elementary school teachers who are normal school graduates								x	x				2
6. Percent of teachers holding above first grade certificates										x			1
7. Percent of all teachers who are normal school graduates											x		1
8. Percent of all teachers who are college graduates											x		1
9. Percent of teachers having two or more years of college training												x	1
School Plant													
1. Percent of children who have 60 sq. ft. or more of playground space						x							1
2. Percent of children enrolled who attend school a full day in adequate buildings owned by the city						x							1
3. Percent of elementary pupils with 50 sq. ft. of playground space per elementary pupil contiguous to the school							x						1
4. Adequacy of educational facilities										x			1
5. Value of school property per child in average daily attendance											x		1

[1] Citations to the published and unpublished studies which form the basis for this table may be readily found in the footnotes to the accompanying text.

TABLE 5.—*(Continued)*

Factor	State ratings					City ratings			County ratings				Number of times factor is used
	Ayres	Phillips	Schrammel	Witham	Sias	Frasier	Harrell	Thompson	Grimm	Combs	Wiley	Brown	
1—	2	3	4	5	6	7	8	9	10	11	12	13	14
General Finance													
1. Average expenditure per child in average daily attendance	x		x					x				x	4
2. Average expenditure per child of school age	x	x										x	3
3. Average expenditure per teacher employed	x											x	2
4. Expenditure per pupil for purposes other than salaries	x	x										x	3
5. Expenditure for education per capita of total population			x										1
6. Expenditure for education per $1000 of "estimated true value of all property"			x										1
7. Percent of current expenditure devoted to instruction								x					1
8. Tax rate necessary to raise amount of money devoted to schools								x					1
9. Average annual cost for current expense per elementary school pupil in average daily attendance over a 3-year period									x				1
10. Expenditures for education from local funds per capita of enrolment										x			1
11. Total cost of education per school room										x			1
12. Expenditures for instruction per child enrolled										x			1
13. Expenditures per child enrolled										x			1
14. Financial index[2]										x			1
15. True (County) tax rate for elementary schools											x		1
16. True (District) tax rate for schools											x		1
17. Operating expenditures per child in average daily attendance											x		1
18. Bonded debt for school purposes per $1000 of true property valuation											x		1
Class Size													
1. Percent of elementary classes having fewer than 40 children enrolled						x	x						2
Achievement													
1. Percent of those taking the regents examinations who passed them							x						1
2. Academic index[3]										x			1
3. Percent of children not retarded											x		1
4. Percent of annual expectation graduating from the eighth grade												x	1
5. Percent of annual expectation graduating from high school												x	1
Supervision													
1. Percent of total supervising hours to total teaching hours during a typical week							x						1
Salaries													
1. Expenditure for salaries per teacher	x									x	x	x	4
2. Average salary of teachers, principals, supervisors		x							x				2
3. Percent of the increased cost of living, 1913–14 to 1919–20, that was met by increased salaries for elementary women teachers						x					x		2
4. Average annual salary of elementary teachers								x					1
Literacy													
1. Percent of literates 10 years of age and over		x	x										2
2. Percent of illiteracy eliminated during preceding decade			x										1
Higher Education													
1. Percent of high school graduates continuing education		x					x						2

[2] Financial index is calculated from a formula based on item 1 under salaries, and items 10, 11, 12, and 13 under general finance.

[3] Academic index is calculated from a formula based on items 1 and 3 under attendance, item 6 under teacher training, item 2 under enrolment, and item 4 under school plant.

Grimm ranked the counties of Illinois on one of the Ayres criteria; namely, the average number of days schools were kept open, and on five other factors: percent of total public school enrolment in high school, percent of teachers having six or more years training above eighth grade, percent of elementary school teachers who are normal school graduates, average annual cost for current expense per elementary school pupil in average daily attendance over a three-year period, and average salary of teachers, principals, and supervisors.

Wiley ranked California counties on twelve items. In addition to items on length of session, attendance, enrolment, teacher training, and school tax and expenditure, he included percent of pupils not retarded and percent of the increase in the cost of living since 1913-14 which has been met by increases in the salaries of elementary women teachers.

Combs ranked the counties of Virginia according to five educational and five financial factors. He calculated both an academic and a financial index for each county, added the two and took the arithmetic average as a general index upon which to rank the counties.

Brown ranked the counties of Oklahoma by means of the ten criteria of the Ayres Index in combination with three other factors, namely, the percentage of annual expectation graduating from the eighth grade, the percentage of annual expectation graduating from high school, and the percentage of teachers having two or more years of college training. These three items he combined with the Ayres Index by adding the percentage of each item for each county and multiplying by five-thirds times one-tenth to make the three factors count for the same as the five educational or the five financial factors in the Ayres Index.

The ten indexes which have thus far been mentioned, namely, those by Ayres, Phillips, Schrammel, Frasier, Harrell, Thompson, Grimm, Combs, Wiley, and Brown, plus two other indexes to be mentioned below (Sias' and Witham's), use, all told, 61 different statistical items. Of these 61 factors, only 21 were used in more than one index, and only 9 were used more than twice. These nine factors, together with the number of indexes using them, are:

1. Average number of days schools were kept open..... 7 studies
2. Percent of total enrolment found in high school..... 5 studies
3. Percent of school population attending schools daily..... 5 studies
4. Average expenditure per child in average daily attendance ..... 4 studies
5. Expenditure for salaries per teacher employed ..... 4 studies
6. Percent of enrolment in average daily attendance..... 3 studies
7. Expenditure per pupil for purposes other than salaries. 3 studies
8. Average expenditure per child of school age..... 3 studies
9. Average number of days attended by each child of school age ..... 3 studies

Out of the total 61 items, 18 are financial, 15 deal with enrolment and attendance; 5, with the school plant; 9, with teacher preparation; 5, with pupil achievement; 4, with teachers' salaries; and 2, with literacy. Table 5 summarizes the statistical factors suggested for inclusion in indexes of school efficiency[1] in state, county, and city school systems.[2]

[1] The 10 factors used in the Ayres Index of 1912 are not included, since the ones used by Ayres in 1920 are assumed to replace the items used in his earlier study. The 1912 index was based on these ten items: percent of children 5-17 enrolled in public and private schools; total school revenue; average value of public school property per child of school age; current expenditure for public schools per child of school age, minus private school enrolment; average days attended in public schools per child of school age, minus private school enrolment; average number days schools were open; average number days attendance for each pupil enrolled; cost per child per day in public schools for current expense; proportion high school enrolment is of elementary school enrolment; average annual salary, teachers, principals, supervisors.

[2] Other projected, but as yet tentative, studies in this field which have come to the attention of the Research Division are: An index of efficiency for Ohio school districts, the factors used being based in part on questionnaire returns, by J. J. Lowden, Ohio State University; an index for state school systems based on six items which is being developed by M. M. Daugherty for the Delaware School Foundation; and a study planned by the National School Finance Survey.

Estimates Based on a Single Factor

In contrast to these elaborate methods of indexes and ranks, brief mention should be made of two attempts to estimate the efficiency of a state school system statistically in terms of a single factor. Witham, asserting that "the efficiency of school systems varies directly as their holding power," proposes a measure of school efficiency based on the percent of pupils found in each grade. He first fixes certain standards for the distribution of pupils by grades. The index of efficiency is then found by comparing the actual grade-distribution of pupils in a given state with these standards. This "index of holding power" has been calculated for each state for 1923-1924.[1]

Another item which has been suggested as a numerical index of state school efficiency was used by Sias in 1926. In attempting to evaluate different methods of apportioning state school funds, a need arose for a measure of state school efficiency. The measures then available were tested and rejected because no satisfactory method of weighting the various factors could be discovered. A single item was therefore sought which "can be obtained with some degree of exactness and which will be, without question, a measure of school efficiency."[2] This single item, according to Sias, is the average number of days attendance for each child of school age.

Difficulties Involved in Statistical Analyses

On the whole, none of these attempts to determine relative school efficiency can be said to have failed in its purpose. For its own special purposes each study has made an important, sometimes an exceedingly important, contribution. But as purely objective measures of school efficiency which can command universal acquiescence, none of the studies can be said to have succeeded.

Statistical criteria for the measurement of state school efficiency possess the great advantages of definiteness, appeal to the public, and ease of recurrent application. But precisely because of these alluring advantages certain dangers lurk in placing exclusive reliance on them and in hasty or uncritical interpretation of the comparative statistics which quantitative criteria develop. Before it is possible to derive and to make proper use of quantitative criteria the following difficulties must be faced and overcome:

1. The data from which the criteria are computed must be comparable. If, for instance, states are to be ranked with respect to the regularity with which children attend their schools, the validity of such ranking will depend on the fact that "a day's attendance" means the same thing in each state under consideration. The degree to which the states do not keep their basic statistical records with reasonable degree of uniformity[3] constitutes a first possible source of error in applying quantitative criteria to state school systems.

2. Every quantitative criterion to be used must possess a demonstrable relationship to the efficiency of the schools. For example, if state school systems are to be reliably rated according to the percent of illiterates in the state or according to the percent of boys enrolled in high schools, or according to the number of volumes in school libraries, it must be possible to show (either logically or statistically, and preferably both) that these factors are directly and intimately associated with school efficiency. Therefore, the selection of a given criterion at random, or merely because the data upon it are easily available, creates a second chance for error.

3. The relative weight of different factors in affecting school efficiency must be known. If, for instance, the expenditure for teachers' salaries is three or twenty or a hundred times more important in determining the efficiency of a school system than, say, the percent of high school graduates entering college, it is obvious that a serious error would be involved by taking as a measure of efficiency the simple average of these two factors. The practice of averaging a number of different factors to secure a single measure of school efficiency is based on the doubtful assumption that all factors considered are of equal importance. Unless, therefore, the factors considered are weighted according to their importance, a third serious error is likely to occur.

Although it is impossible completely to avoid all of the difficulties just mentioned, it does not follow that the ranking of states on quantitative criteria is an enterprise of no value or that the attempts to rate the states on such factors should be abandoned. It does mean, however, that results of such ratings should be cautiously interpreted, that the possibilities of error should be recognized, and that such ratings should be supplemented by such other estimates of school efficiency as are available.

[1] Witham, Ernest C. "Index of Holding Power." *American Educational Digest* 46: 548-51; August, 1927. "Public School Progress of the States." *American School Board Journal* 75: 37-39; October, 1927.

[2] Sias, A. B. *The Financing of a State School System.* Unpublished Ph. D. thesis. Stanford University, Calif., 1926.

[3] Reavis, William C. "Items of Information Collected by Departments of Public Instruction of Ten Representative States." *Elementary School Journal* 29: 666-73; May, 1929.

Bibliography on Statistical Measures of School Efficiency

1. ALABAMA. *Annual Report for the Scholastic Year Ending September 3, 1920.* Part I. Montgomery, Alabama: State Superintendent of Education, 1920. p. 32-43.

   This study of the rural elementary schools of the 67 counties of Alabama is based on the Ayres Index.

2. ALEXANDER, CARTER. "Presenting Educational Measurements So As to Influence the Public Favorably." *Journal of Educational Research* 3: 345-58; May, 1921.

   A criticism of the use of educational measurements. Emphasizes the need for a style of presentation adapted to the public.

3. ALMACK, JOHN C. "Class Size and Efficiency." *Journal of the National Education Association* 12: 107-09; March, 1923.

   Formulates size of class and efficiency indexes for ten cities based on wealth per pupil, cost per pupil, cost per class, and pupils per class in the elementary schools of 196 cities.

4. ANGOFF, CHARLES, and MENCKEN, H. L. "The Worst American State." *American Mercury* 24: 1-16, September; 175-88, October; 355-71, November, 1931.

   Ranks states on wealth, education, health, public order, and other factors.

5. AYRES, LEONARD P. *A Comparative Study of the Public School Systems in the Forty-eight States.* New York: Russell Sage Foundation, 1912. 33 p.

   A pioneer investigation of the relative efficiency of the school systems of the 48 states.

6. AYRES, LEONARD P. *An Index Number for State School Systems.* New York: Russell Sage Foundation, 1920. 70 p.

   A statistical measure devised to make possible a numerical comparison of one state school system with another, and with that of the United States as a whole; also can be used as a measure of progress of a school system from year to year.

7. BAGLEY, WILLIAM C. "Do Good Schools Pay?" *Journal of the National Education Association* 12: 211-16; June, 1923.

   Contains a comparison of forty-one states as to median scores in "army alpha" with the ranks of the same states in school efficiency in 1900. (Ayres' Rating).

8. BAGLEY, WILLIAM C. "On the Possibility of Securing 'Moral Ratings' for the Several States." *Educational Administration and Supervision* 11: 289-306; May, 1925.

   An attempt to find a causal relationship between public education and the morals of the general population of each state as indicated by three criteria.

9. BAGLEY, WILLIAM C. "Why Some States Read More." *School and Society* 18: 531-32; November 3, 1923.

   A discussion of Reeder's statistics of magazine circulation distributed by states. (See reference 36, below.) Obtains a correlation coefficient of .91 between the data of magazine circulation and school rating of twenty-six states.

10. BROOKS, E. C. "The Taxpayer's Idea of School Business Administration." *School Executives Magazine* 49: 553-55; August, 1930.

    A criticism of the Ayres scale for measuring the efficiency of state school systems.

11. BROWN, E. E. *A Statistical Survey by Counties of Education in Oklahoma.* Bulletin No. 110. Oklahoma City, Okla.: State Department of Education, 1925. 62 p.

    Employs a modified form of the Ayres Index together with three other factors in measuring the efficiency of the county school systems of Oklahoma.

12. "Can We Lift Ohio 22 Notches?" *Journal of Educational Research* 3: 71-73; January, 1921.

    Gives an account of an attempt to rank the 48 states on (1) the percent of cities in each state making systematic use of tests, and also on (2) the percent making any use of tests, systematic or irregular.

13. COMBS, M. L. *Efficiency in Relation to Size of High Schools,* Vol. 10, No. 3. Richmond, Va.: Bulletin State Board of Education, March, 1928. 124 p.

    A study made to determine what size of high school is most desirable from the standpoint of both cost and efficiency. The schools were rated on teaching staff, salaries, per capita cost of instruction, program of studies, material equipment, holding power, results of tests, record of graduates in freshman year at college and percentage of high schools meeting accredited requirements.

14. CONNECTICUT STATE BOARD OF EDUCATION, DIVISION OF RESEARCH AND SURVEYS. *Tentative Index Number for the Schools of Connecticut Cities and Towns.* Hartford, Conn.: State Board of Education. Mimeographed, 12 p.

    Eight factors used as criteria in formulating an index number.

15. COOK, ALBERT S. "What Should the People of a State Be Told About Their Schools?" *Educational Administration and Supervision* 9: 65-75; February, 1923.

    Gives an account of Maryland's publicity campaign for better schools inspired by the publication of Ayres Index of efficiency of state school systems.

16. "Counties Ranked on School Factors." *Illinois Teacher* 18: 38-39; October, 1929.

    One hundred two Illinois counties were ranked on six factors related to school efficiency. The counties were also ranked on ability to support education.

17. DELAWARE. *Annual Report of the Department of Public Instruction for the Year Ending June 30, 1929.* Dover, Del.: State Board of Education, 1929. p. 219.

    Ranks Delaware on the ten factors included in the Ayres Index, from 1890 to 1929.

18. EBAUGH, MARY O. *Index Number for the Public High Schools in the Counties of Maryland,*

1917-18, 1918-19, and 1919-20. Unpublished Master's thesis. Baltimore, Md.: Johns Hopkins University, 1920.

Applies the Ayres Index to Maryland counties, adapting it to the high school situation.

19. ENGELHARDT, N. L., and ALEXANDER, CARTER. *School Finance and Business Management Problems.* New York: Teachers College, Columbia University, 1928. p. 7-9.

An exercise to determine whether or not any relation exists among the various types of administrative control of schools in the state and the result, other than fiscal, of the influence of the type of control. Each city was to be ranked on eleven items.

20. FRASIER, GEO. W. *The Control of City School Finances.* Milwaukee, Wis.: Bruce Publishing Co., 1922. Chapters 7 and 8, p. 65-82.

An attempt to discover what method or degree of fiscal control is best for city school systems. In working out this problem the investigator devised a statistical measure of the relative achievement of city school systems. One hundred sixty-nine cities were rated on six items.

21. GULICK, LUTHER. "Wanted: A Measuring Stick for School Systems." *National Municipal Review* 18: 3-5; January, 1929.

Defends the proposition that "current methods of measuring school performance do not really measure," but regards the efforts put forth as a manifestation of the "research temper" of our times and a hopeful sign.

22. ILLINOIS STATE SUPERINTENDENT OF PUBLIC INSTRUCTION. *Educational Press Bulletin,* Nos. 252, 253; February, March, 1930.

A criticism of the Ayres Index as a measure of school efficiency with special reference to the effect of private schools on rank and errors liable to be present because of diverse methods of reporting data employed by individual states. Ranks states with certain of the Ayres items modified.

23. ILLINOIS STATE SUPERINTENDENT OF PUBLIC INSTRUCTION. *Educational Press Bulletin,* No. 273, March, 1932.

Refers to the Phillips ranking of the states in 1932 by the Ayres scale. Finds evidence in Illinois high rank which tend to support the writer's criticisms of Illinois' former rating on this same scale.

24. MAINE. *Report of the State Commissioner of Education.* Augusta, Maine: State Department of Education, 1926. p. 45-46.

Gives Maine's rating on the various factors included in the Phillips' ranking of the states in 1924.

25. MARYLAND. *A Graphic Picture of Maryland Schools, 1920-21.* Bulletin, 1921. Baltimore Md.: State Department of Education, 1921. 63 p.

Applies the Ayres Index to Maryland counties.

26. MARYLAND. *Fifty-fifth Annual Report of the State Board of Education for the Year Ending July 31, 1921.* Baltimore, Md.: State Department of Education, 1921. 205 p.

Compares ratings of Maryland schools from 1918-1921 in accordance with the Ayres Index. Computes indexes for the counties separately. p. 7-47.

27. MARYLAND. *Measurable Evidence of Progress in Maryland Public Schools, 1926.* Baltimore, Md.: State Department of Education, 1927. 213 p.

A general review of progress in the schools of Maryland. Contains data on Maryland's index numbers in the various educational ratings which have been made since 1918. Table 121 ranks the counties of Maryland according to the Ayres' Index of educational efficiency.

28. MCGAUGHY, J. R. *The Fiscal Administration of City School Systems.* Educational Finance Inquiry Commission. New York: Macmillan Co., 1924. 95 p.

In studying the relationship between fiscal independence and school efficiency the writer used the criteria set forth by Frasier as measures of the efficiency of a city school system.

29. MORT, PAUL R., and HILLEBOE, GUY L. *A Rating Scale for Elementary School Organization.* New York: Teachers College, Columbia University, 1930. 47 p.

A plan for rating the elementary school on the progress and adjustment of pupils, educational activities, school environment, and morale and services.

30. MYERS, C. E. "Educational Ranking of the States." *Pennsylvania School Journal* 75: 237-40; December, 1926.

Discusses the Ayres' system of measuring school efficiency and suggests that two scales are needed; one which measures instructional efficiency, and one which measures financial efficiency. Presents formulae designed to measure school systems according to these two scales.

31. NEW YORK. *Fiscal Problems of City School Administration.* Report by the Special Joint Committee on Taxation and Retrenchment. Legislative Document, 1928, No. 66. Albany, New York: State of New York, 1928. 130 p.

Chapter four reviews various attempts to measure school efficiency, presents general conclusions concerning the use of such measures and suggests further study of the problem.

32. ODELL, CHARLES W. *The Progress and Elimination of School Children in Illinois.* Urbana, Ill.: University of Illinois, 1924. 75 p.

Includes a chapter on holding power as an index of school efficiency.

33. PHILLIPS, FRANK M. "Educational Ranking of States by Two Methods." *American School Board Journal* 69: 47-49; December, 1924.

Brings the Ayres' index for state school systems up to date with two important adaptations: (1) the purchasing power of the dollar was taken into account, and (2) the states were grouped into urban, mixed, and rural types to make comparison possible; also formulates a method of ranks based on different statistical factors on which to rate state school systems.

34. PHILLIPS, FRANK M. "Educational Rank of States, 1930." *American School Board Journal* 84: 25-29; 37-39; 29-30; February, March, April, 1932. A revision and extension of reference 33.

35. Reeder, Ward G. "Amount and Kind of Reading in the Various States." *Educational Research Bulletin* 3: 179-82; April 30, 1924.

The writer considers the amount and kind of reading in the various states as indicative of the amount of education in a state. The rank of each state was computed by finding the percent which the total circulation of twenty-three magazines in the state was of its population.

36. Reeder, Ward G. "Which States Read Most?" *School and Society* 18: 235-40; August 25, 1923.

Ranks states according to the percent of population reading ten magazines, a study which preceded that cited above.

37. Schrammel, Henry E. *The Organization of State Departments of Education.* Ohio State University Studies, Bureau of Educational Research Monographs, No. 6. Columbus, Ohio: Ohio University Press, 1926. Chapter 9.

An investigation to determine the relationship which exists between types of organization and degree of efficiency. In order to obtain the statistical measure of efficiency necessary to complete this study, the author ranked the forty-eight states on eleven items.

38. Schrope, J. M. *An Index Number for District School Systems of Schuylkill County.* Harrisburg, Pa.: State Department of Public Instruction, 1921.

Survey of School systems of 68 districts in the county, using the Ayres Index.

39. Sias, A. B. *The Financing of a State School System.* Unpublished Ph. D. thesis. California: Stanford University, 1926.

Uses the average number of days attendance for each child of school age as a measure of school efficiency.

40. Stetson, Fred L., and Almack, John C. *County School Systems of Oregon.* Salem, Oregon: State Department of Education, 1921. 26 p.

Compares counties of Oregon on ten points of efficiency over a period of six years.

41. Van Sickle, James H.; Ayres, Leonard P.; Kendall, Calvin N.; Maxwell, William H. "The Investigation of the Efficiency of Schools and School Systems." *Proceedings, 1915.* Washington, D. C.: National Education Association, 1915. p. 379-402.

A review of early attempts to measure school efficiency objectively. Deals chiefly with the school survey.

42. Virginia. Superintendent of Public Instruction. *Annual Reports,* 1923-24, 1924-25, p. 22-23, and 1925-26, p. 27-30. Richmond, Va.: Superintendent of Printing, 1924, 1925, 1926.

Rates counties of Virginia on twelve points.

43. West Virginia. *Report of State Superintendent of Free Schools, 1927-28.* Charleston, W. Va.: Department of Free Schools, 1928. p. 259-61.

Applies the Ayres scale to the counties of West Virginia.

44. Wiley, Ross B. *An Educational Index Number for California Counties.* Unpublished Master's thesis. Berkeley, Calif.: University of California, 1925.

Rates county school systems on twelve items.

45. Williams, Aubrey W., editor. *How Good Is Your Town?* Madison Wisconsin: Wisconsin Conference of Social Work, 1931. 124 p.

Contains forms for making surveys of the various institutions and conditions in a community. These forms may be used for organizing information concerning the historical background, city planning system, municipal government, industry, health, education, library, social work, recreation, town and country relations and religion.

46. Witham, Ernest C. "Public-School Progress of the States." *American School Board Journal* 75: 37-39; October, 1927.

Calculates "index of holding power" of the school systems of the forty-eight states.

47. Witham, Ernest C. "Index of Holding Power." *American Educational Digest* 46: 548-51; August, 1927.

Offers the holding power of a school system as an index of its efficiency.

The Present Standing of State School Systems on Five Factors Related to Efficiency[1]

Problem and Purpose of the Section

No formula for measuring state school efficiency by means of a single mathematical quantity has yet been discovered. In the light of present knowledge it is impossible to combine a series of factors related to school efficiency and to draw from this combination an acceptable single index. The interplay of forces is so complex and differs so greatly from state to state that the discovery of such a formula must await the results of long and patient research and the development of new technics and measuring devices. It is a problem for the future.

Fortunately, however, a formula is not necessary in order to present significant data relative to the present educational status of the forty-eight states. It is entirely possible to name a number of factors which are generally conceded to be closely related to the efficient functioning of a school system. Practical experience and educational research combine to demonstrate that certain of these factors are essential, not only to the progress, but to the very operation of an effective school organization, and that progress in any of these results in the advancement of the whole school system. To show the standing of the states on such factors is the purpose of this section of the Bulletin.

Factors selected—From among these basic factors, five have been selected to indicate the present educational situation in the forty-eight states. These five factors have been chosen because they are widely accepted as valid, because their validity is supported by the data available, and because reasonably reliable, nationwide figures are available on each one.

Among the crucial questions which might be raised concerning the quality of a state school system, the following would surely occur: How many children does the school system reach? For how long does the school system maintain contact with these children? What quality of teaching service has been purchased for them? Under what favorable or unfavorable environmental conditions is the education conducted? What general education advancement of the state has been attained? These questions are covered in the items listed below:

1. The proportion of children reached by the services of the schools.
2. The holding power of the schools.
3. The quality of teaching provided.
4. The school environment.
5. The percent of literacy.

Limitations of the study—While it would be highly desirable to know the exact weight that each of these five factors should have in a single measure of the efficient functioning of a school system, such knowledge is not essential to this study since no attempt is made to combine the data into a single index number or rank for each state. *With our present lack of knowledge of the proper weighting no attempt should be made to combine these factors into a single quantity.*

The validity of these factors rests chiefly on logical reasoning with a certain limited amount of statistical evidence. The choice of these particular criteria depends on certain very practical considerations. Obviously, a nearer approach to an exact measure of state school efficiency would be to obtain direct measures by means of tests of the growth in interests, desirable social habits and attitudes, and academic achievement of every child within each state, and to compare the data thus secured with the effort (as measured, for example, by school costs, corrected for sparsity of population) which was required to produce the results obtained. It is equally obvious that the present limits in financial and technical resources preclude the use of such a plan. The selection of quantitative criteria is limited not only by the requirements that the data used shall be comparable and shall possess a demonstrable relationship to school efficiency, but also by the availability of reasonably accurate statistics.[2] The essential difference between the figures to be reported here and those presented in the previous investigations summarized above is that in this bulletin no attempt is made to set up a single general measure of school efficiency.

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[1] Acknowledgments are due the following for advice in connection with this section: John K. Norton and Paul R. Mort, Teachers College, Columbia University; E. M. Foster, U. S. Office of Education; A. B. Sias, Ohio University. These specialists, however, are not responsible for the methods used or conclusions reached.

[2] For the concept of efficiency used in the Bulletin, see page 79.

Sources of Data—The figures presented in this section are as accurate and comparable as possible when comparisons among states are attempted. The reports of two United States official agencies, the Census Bureau and the Office of Education are the only sources used. The Census Bureau figures are those of the Fifteenth Decennial (1930) Census. These figures are secured by enumerators employed by the Federal Government. The Census Bureau attempts to cover every person living in the United States at the time of the enumeration by a dwelling-to-dwelling canvass. The Census figures are usually regarded as highly reliable for data of this sort.

The figures published by the Office of Education are not collected originally by Federal officials but are reported by a responsible member of the State Department of Education in each state. Although the Office of Education sends field workers at intervals to assist in preparing these reports, final responsibility for the figures submitted rests with the several State Departments of Education.[1] Statistics from the Office of Education used in this Bulletin are for the school year 1929-30.

Presentation of data—The figures for the five factors listed above are presented state by state in Tables 6, 7, 9, 10 and 11, respectively, and are brought together in summary form in Table 12. The states are not arranged alphabetically in these tables, since that order contributes little or nothing to the comparison and interpretation of the figures.

The arrangement of the states is in order of the percent of their population which is urban. This fact is probably the most significant single social fact on which reliable data exist. As the subsequent discussion will show, it has a close connection with many of the factors related to school efficiency.

Discussion of Factors

The five factors used in this part of the bulletin have been merely listed above. A more complete discussion follows:

1. *The proportion of children reached.*—However excellent the educational facilities provided by a state, they are effective only to the extent that they reach those for whom schools are primarily provided. Hence, the amount of school attendance is a basic preliminary measure of the effectiveness of a school system. Such a measure should include both public and non-public schools.

The relative amount of school attendance in any state depends on (1) the proportion of all children who are enroled in school, (2) the proportion of those enroled who actually attend, and (3) the number of days schools are in session. In this study these three items are included in a single figure called the "amount of school attendance." An attempt is made to take account of all children 5 to 17 years of age attending schools of any type or level—public, private, or parochial; kindergarten, elementary, secondary, special, or collegiate.

No data can be obtained at present upon which to base an exact calculation of the relative amount of attendance *in both public and non-public schools.* The United States Decennial Census reports for 1930[2] and the Biennial Survey of Education for 1929-30,[3] however, supply data upon which a rather accurate estimate can be based. The detailed procedure for making these estimates is described in the following paragraphs. A reader who does not care to go into this detail may readily omit the paragraphs which follow, beginning again on page 116.

The following pertinent facts may be secured from the Census: (1) the number of children 5 to 17 years of age, inclusive, in the general population of the state, and (2) the number of children 5 to 17 years of age, inclusive, who attended school any time between September 1, 1929 and April 1, 1930. This number includes children attending any type of school. Since the length of time school was attended is not specified, the "attendance" reported by the census is roughly equivalent to enrolment in school as usually understood.[4]

The Biennial Survey of Education supplies these additional pertinent data: (1) The number of children attending public schools daily for each 100 enrolled in school; or in other words, the percent which the daily attendance is of the total enrolment. This includes all children attending public school without regard to ages. (2) The average number of days public schools are in session.

Usable figures on attendance and term length for private schools and colleges are not available.

However, with the above Census and Office of Education data at hand, the calculations suggested by Table 6 were carried out. First, the total

[1] Some question has arisen concerning the accuracy of the report from Rhode Island for the year 1929-30. The figures used in this Bulletin are those used by the U. S. Office of Education, which in turn relied upon data from the Rhode Island State Department of Education. However, since submitting these figures to the Office of Education, the Rhode Island Department of Education has submitted new data to the Research Division as follows: Number of children 5–17, 166,291; number of children reported as attending school, 148,097; average number of days attended by each child enrolled in public schools, 174; number of children aged 14, 15, 16, 17 years, 46,994; number of children reported as attending, aged 14, 15, 16, 17 years, 32,414; average salary paid teachers, principals, supervisors, $1,687. This second set of figures differs markedly both from the Census figures and the Office of Education figures used in this Research Bulletin. If the figures cited in this footnote were used for the state of Rhode Island the state would rank first with respect to amount of attendance, thirty-sixth with respect to holding power and sixth with respect to average salary paid teachers. These ranks are all higher than those assigned to the state by the figures used by the Office of Education and reproduced in Tables 6 to 12.

[2] Fifteenth Census of the United States: 1930. *Population Bulletins.* Washington, D. C.: Government Printing Office, 1931.

[3] U. S. Department of the Interior, Office of Education. *Biennial Survey of Education 1929-1930.* Bulletin, 1931, No. 20.

[4] The question asked by the enumerator was: Has the person attended school any time since September 1, 1929?

TABLE 6—AMOUNT OF SCHOOL ATTENDANCE, BY STATES, 1930

States and territories	Percent of population urban	Number of children 5–17 years of age in population	Aggregate days attendance if every child 5–17 years of age attended 200 days	Number of children 5–17 years of age "attending" school (according to Census)	Average number of days attended by each child enrolled (in public schools)	Estimated number of days aggregate attendance	Relative amount of attendance (percent which col. 7 is of col. 4)	Rank on col. 8
1	2	3	4	5	6	7	8	9
Continental United States	.....	31,571,322	6,314,264,400	25,392,855	143.0	3,679,421,799	57.51	.....
District of Columbia	100.0	88,104	17,620,800	76,260	146.5	11,172,090	63.40	.....
Rhode Island	92.4	169,889	33,977,800	137,784	151.5	20,874,276	61.44	22
Massachusetts	90.2	999,696	199,939,200	856,979	163.1	139,773,275	69.91	2
New York	83.6	2,792,806	558,561,200	2,375,650	163.4	388,181,210	69.50	3
New Jersey	82.6	985,274	197,054,800	835,308	157.7	131,728,072	66.85	8
Illinois	73.9	1,770,315	354,063,000	1,467,794	162.5	238,516,525	67.37	7
California	73.3	1,139,224	227,844,800	1,017,339	151.6	154,228,592	67.69	6
Connecticut	70.4	402,773	80,554,600	338,315	157.9	53,419,939	66.32	9
Michigan	68.2	1,195,057	239,011,400	1,041,439	161.5	168,192,399	70.37	1
Ohio	67.8	1,599,554	319,910,800	1,357,408	160.0	217,185,280	67.89	5
Pennsylvania	67.8	2,549,904	509,980,800	2,044,742	155.4	317,752,907	62.31	20
Maryland	59.8	402,562	80,512,400	308,012	158.0	48,665,896	60.45	27
New Hampshire	58.7	109,241	21,848,200	90,233	159.0	14,347,047	65.67	10
Washington	56.6	357,028	71,405,600	304,291	145.0	44,122,195	61.79	21
Indiana	55.5	783,553	156,710,600	649,713	155.1	100,770,486	64.30	13
Wisconsin	52.9	743,844	148,768,800	633,246	150.3	95,176,874	63.98	14
Utah	52.4	153,686	30,737,200	131,449	150.7	19,809,364	64.45	12
Delaware	51.7	57,610	11,522,000	46,336	156.6	7,256,218	62.98	18
Florida	51.7	378,446	75,689,200	288,366	119.0	34,315,554	45.34	39
Oregon	51.3	214,179	42,835,800	181,280	140.1	25,397,328	59.29	28
Missouri	51.2	860,094	172,018,800	692,039	158.6	109,757,385	63.81	15
Colorado	50.2	260,748	52,149,600	215,869	142.8	30,826,093	59.11	30
Minnesota	49.0	657,090	131,418,000	555,924	149.1	82,888,268	63.07	17
Texas	41.0	1,627,836	325,567,200	1,161,676	126.4	146,835,846	45.10	40
Maine	40.3	195,796	39,159,200	167,217	160.0	26,754,720	68.32	4
Louisiana	39.7	606,318	121,263,600	441,886	121.5	53,689,149	44.27	42
Iowa	39.6	614,740	122,948,000	538,675	147.4	79,400,695	64.58	11
Kansas	38.8	476,464	95,292,800	403,333	143.7	57,958,952	60.82	26
Nevada	37.8	19,007	3,801,400	15,987	148.5	2,374,070	62.45	19
Nebraska	35.3	357,648	71,529,600	313,795	139.6	43,805,782	61.24	24
Arizona	34.4	117,218	23,443,600	88,955	128.1	11,395,136	48.61	35
Tennessee	34.3	752,173	150,434,600	557,536	125.3	69,859,261	46.44	38
Oklahoma	34.3	695,334	139,066,800	554,463	119.4	66,202,882	47.61	36
Montana	33.7	141,349	28,269,800	118,250	151.9	17,962,175	63.54	16
Vermont	33.0	87,563	17,512,600	70,701	151.2	10,689,991	61.04	25
Virginia	32.4	716,445	143,289,000	513,970	131.9	67,792,643	47.31	37
Wyoming	31.1	57,795	11,559,000	48,409	141.3	6,840,192	59.18	29
Georgia	30.8	894,723	178,944,600	632,518	111.7	70,652,261	39.48	46
Kentucky	30.6	753,063	150,612,600	550,391	121.4	66,817,467	44.36	41
Idaho	29.1	127,201	25,440,200	105,074	132.4	14,044,198	55.20	33
Alabama	28.1	817,365	163,473,000	580,573	114.0	66,185,322	40.49	45
West Virginia	28.4	520,236	104,047,200	393,120	146.6	57,631,392	55.39	32
North Carolina	25.5	1,030,317	206,063,400	756,763	119.7	90,584,531	43.96	43
New Mexico	25.2	127,324	25,464,800	96,709	128.5	12,427,107	48.80	34
South Carolina	21.3	592,047	118,409,400	406,964	109.1	44,399,772	37.50	48
Arkansas	20.6	560,048	112,009,600	422,546	108.3	45,761,732	40.86	44
South Dakota	18.9	195,477	39,095,400	160,608	149.4	23,994,835	61.38	23
Mississippi	16.9	613,148	122,629,600	480,811	97.7	46,975,235	38.31	47
North Dakota	16.6	204,010	40,802,000	165,149	145.5	24,029,180	58.89	31
Alaska	.....	.....	.....	.....	148.7	.....	.....	.....
American Samoa	.....	3,306	661,200	2,336	165.0[1]	385,440	58.29	.....
Canal Zone	.....	.....	.....	.....	180.0	.....	.....	.....
Guam	.....	5,744	1,148,800	3,809	194.7	741,612	64.56	.....
Hawaii	.....	.....	.....	.....	161.6	.....	.....	.....
Philippine Islands	.....	.....	.....	.....	172.8	.....	.....	.....
Porto Rico	.....	.....	.....	.....	167.1	.....	.....	.....
Virgin Islands	.....	5,925	1,185,000	4,438	194.2[1]	861,860	72.73	.....

[1] Statistics for 1927–28.

population 5 to 17 years of age (Column 3, Table 6) was multiplied by 200. The product (Column 4, Table 6) is the aggregate number of days attendance resulting if every child of this age range had attended school every day of a 200-day term. This figure may be arbitrarily taken as the desirable amount of attendance.[1] It is to be divided into the total amount of attendance actually secured in order to form a basis for ranking of states on this point.

The actual number of children enrolled ("attending" according to Census terminology) in schools of all types between 5 and 17 is taken from Census data (Column 5, Table 6). This number is multiplied by the average number of days attended by each pupil enrolled in public elementary and secondary schools (Column 6, Table 6).[2] The only necessary assumption involved here is that the relatively small proportion of school children below 5 and over 17, and children enroled in private schools attend school with approximately the same regularity and during approximately the same sessions as children between 5 and 17 in public schools.

The product (Column 7, Table 6) represents the amount of school attendance achieved by the children 5 to 17 in each state. If this product be divided by the desirable amount of such attendance, the resulting ratio (Column 8, Table 6) represents the relative amount of attendance and the state is ranked on this basis (Column 9, Table 6).

The above calculations, reduced to a formula, may be represented as follows:

Relative amount of attendance=

$$\frac{\text{Actual amount of attendance}}{\text{Desirable and possible amount of attendance}} =$$

$$\frac{\text{Actual: (Enrolment x regularity x term)}}{\text{Desirable: (Enrolment x regularity x term)}} =$$

$$\frac{\text{(Children 5-17 enrolled x (Percent of attendance)}^{2}\text{ x (Length of term)}^{2}}{\text{(All children 5 to 17) x (100\%) x 200 days}} =$$

$$\frac{\text{(Total enrolment for all schools, ages 5-17) x (Ave. number days attended by each child enrolled)}^{3}}{\text{(Total number in population, ages 5-17) x 200 days}}$$

An example will illustrate the application of this method. According to the United States Census for 1930, 756,763 children between 5 and 17 were "attending" (enroled in) the schools of North Carolina between September 1, 1929 and April 1, 1930. The Biennial Survey of Education reports that each child enroled in public schools of that state attended, on the average, 119.7 days. The aggregate daily attendance for the year is computed by multiplying 756,763 by 119.7, or 90,584,531. The total population 5 to 17 years of age in North Carolina numbers 1,030,317. If each one of these children had attended school every day for a 200-day term, the aggregate attendance would have been 206,063,400 days. This figure divided into 90,584,531 days, the actual aggregate attendance, gives a ratio which indicates the relative amount of school attendance in North Carolina and places the state in 43rd position in this respect.

The minimum and maximum ages selected as a basis for calculating the percent of children attending school daily require some discussion. The lower limit, 5 years, includes only children who had attained their fifth birthday by April 1, 1930. The 5-year level is chosen in order to include children of kindergarten age. While national statistics are not available on the average age of entrance to kindergarten, recent studies show the average age of admission to be approximately 5 years.[4] The kindergarten is now almost universally recognized as an integral part of a complete school system, and nearly all states now have laws or provisions of some kind by which kindergartens may be established.[5] The age of 17 is selected as the upper limit because, with approximately normal progress through school, a pupil entering Grade I between his fifth and sixth birthdays has had sufficient time to complete the regular elementary and secondary course of study before his eighteenth birthday.

Table 6 gives the relative amount of attendance for each state and the rank of each state with respect to this factor.

2. *The holding power of the schools.* The power of a school system to hold its pupils in school during the period of their school careers when this task becomes especially difficult is a strong indication of its efficiency.[6] Statistics on elimination show that this period occurs predominantly from grades 7 and 10, inclusive. Koos, in his study of American secondary education, concludes that:

"Elimination runs through many school years; but it is, after all, chiefly a problem of the secondary school if this school is conceived of as extending from the seventh grade into the freshman and sophomore years of college. . . . The largest proportionate elimination takes place between the eight grades and the first year of the conventional high school. It is still large between the first and second high school years, but tapers off rapidly from this point upward, since the great bulk of all pupils have by this time been eliminated." [7]

[1] The choice of 200 days is purely arbitrary in order to give a working basis for the calculations. The rank of the states would be identical if any other figure had been used.

[2] The average number of days attended by each pupil enrolled is, in turn, the product of the regularity of attendance and the length of the term.

[3] In public schools.

[4] Davis, Mary Dabney. *Kindergarten-Primary Education.* U. S. Department of the Interior, Office of Education, Bulletin. 1930, No. 30. Washington, D. C.: Government Printing Office, 1930. p. 27.

[5] Van de Walker, Nina C. *Kindergarten Legislation.* U. S. Department of the Interior, Office of Education. Bulletin, 1925 No. 7. Washington, D. C.: Government Printing Office, 1925.

[6] Holding power has important implications for general social efficiency as well as for educational efficiency in particular. The present unemployment situation emphasizes the need for removing the competition of children in the labor market. See: Morrison, Henry C. *School Revenue.* Chicago: University of Chicago Press, 1930. p. 34–42. Proffitt, Maris M. "The Schools and Unemployment." *School Life* 17: 41–42; November, 1931. National Education Association. *Childhood and the Depression: A Look Ahead.* Washington, D. C.: the Association, 1931. p. 22–33, 41–42.

[7] Koos, Leonard V. *The American Secondary School.* Boston: Ginn and Co., 1927. p. 114–15.

State and local courses of study are generally planned so as to make it possible for a pupil, by completing a grade each year, to complete the first eight grades by the age of fourteen or fifteen. Because of the many factors influencing individual cases, such as natural ability, health, interests, economic conditions, and school opportunity, there is a certain amount of deviation from the average high school entrance age. In order to take account of such variation, the years from fourteen to seventeen, inclusive, have been selected as roughly indicating the range of ages within which most pupils enter high school and pursue the first year or two of their high school course.

During this transition period the holding power of the school is most severely tested. The combined influence of many forces which tend to eliminate the child from school becomes stronger than at any other time in his school history. Eight grades of school have been completed in the large number of schools still maintaining the traditional organization of eight years in the grades and four years of high school, and a more or less difficult adjustment to a new school situation must be faced if the child is to continue in school.

Forces which tend to eliminate the child from school generally originate in one or all of four sources: (1) the home, (2) the child, (3) the community, and (4) the school. Those arising in the home include the financial resources of the family, the nationality of the parents, the amount of schooling received by the parents, the interest of the family in education, etc. Determining factors dependent upon the nature of the child himself are inherent ability, interests, previous success in school, health, age, sex and all others of the complex array which are included under the general term "personality." The community sets general standards, determines the opportunity for gainful occupation, and influences the attitude of the child toward the school. The school opportunity provided, the course of study offered, the effort made to adjust the school environment to individual differences, the social life of the school, are all factors for which the school system is directly responsible since they arise within the school itself.

It is impossible, at the present time, to state definitely just which eliminating forces of those originating within the home, the child, the school, or the community exert a predominating influence in the greatest number of cases. Various studies have been made of the relationship between many of these factors and amount of elimination from school, but the facts presented are subject to different interpretations. While certain of the earlier studies conclude that home conditions, with special reference to financial and social status, are among the chief causes of school-leaving,[1] more recent studies have tended to minimize the effect of poverty on elimination, and to emphasize influences arising from within the child himself; such as, native capacity and success in school.

In reporting a recent study of school elimination in which a number of investigations were summarized, Reed says:

> "In the early period, popular opinion ascribed elimination to economic pressure, or poverty, whereas survey findings indicated very clearly that a considerable percentage of eliminated groups came from comfortable homes and could have remained in school had they, and their parents, considered it worth while."[2]

This investigation also concludes that "inability to accomplish school tasks is the major cause of school elimination," and further, "economic pressure has continuously accounted for less than one-third of school elimination."[3] Feingold also states: "Some drop out for economic reasons, others because they are not fond of book-learning, and still others because they are eager to become financially independent of their parents' purse. But when we come to investigate what kind of individuals drop out in the largest proportion, we find that, as revealed by intelligence tests, it is those who lack the sheer mental ability to do regular high school work."[4] Van Denburg's study also seems to support this conclusion. He found that the

[1] Holley, Charles E. "The Relationship between Persistence in School and Home Conditions." *Fifteenth Yearbook, Part II.* National Society for the Study of Education. Bloomington, Ill.: Public School Publishing Co., 1916. 119 p.

Counts, George S. *The Selective Character of American Education.* Supplementary Educational Monograph, No. 19. Chicago, Ill.: University of Chicago, 1922. 162 p.

[2] Reed, Anna Y. *Waste in Human Education.* New York: Century Co., 1927. p. 20–21.

[3] *Op. cit.*, p. 43.

[4] Feingold, Gustave A. "Intelligence and Persistency in High-School Attendance." *School and Society* 18: 443-50; October 13, 1923.

pupils receiving high marks remained in school longer than those receiving low marks.[1]

The fact that many forces which tend to eliminate the child arise outside the school itself in no way releases that institution from its task of providing a democratic education for "all the children of all the people." Certain problems of the child and the home are also problems of the school; and those upon whose solution depends the continuance of the child in school must be dealt with by the school system. The fact is, an efficient school organization is better adapted and equipped to cope effectively with these problems than is any other existing institution. It can establish part-time or continuation schools for those who must work; it can distribute scholarships to deserving pupils; it can provide curricula which meet the needs of all; it can exert its influence toward the legislative enactment of relief legislation which will place the relief of poverty elsewhere than on the shoulders of childhood. Even if it be true, as many studies indicate, that a considerable proportion of children leave school because they have not the ability to do the regular academic work required, then it is the business of the school system to provide those of different abilities with a training which they can acquire and use. Too long have some schools attempted to adjust the child to the school system. The effective school organization increases its holding power by adapting the school to the needs of the child. Koos comments on this situation:

"The educational offering must be adjusted to the needs of those who are now being eliminated. New curricula must be established, new courses introduced and old courses adapted to the abilities and interests of those whom it is desired to retain."[2]

Palmer also states:

"Schools are making their most successful efforts in solving the problem of adjustment in the lower grades before the pupil has become conscious that he is a misfit. When the work in the upper grades is especially adapted and pupils are placed in classes where they can succeed, much early elimination will cease."[3]

And Feingold says:

"Granted that such individuals have neither the inclination nor the power to comprehend either the value, or the meaning, or the use of Latin, or algebra, or ancient history, they nevertheless do possess special abilities and tastes for things tangible that are just as worthy of being developed. . . . Society is just as duty bound to provide the proper kind of education for its young members of limited mental ability as for its prospective geniûses."[4]

Many similar opinions could be cited. The urbanization of the population, the greatly improved means of transportation, and the consequent increase of school opportunity have brought to the secondary schools a heterogeneous group of pupils. The student body of the high school is no longer made up of highly selected individuals; so that the holding power of the school depends in a large measure upon its ability to minister to the capacities, interests and needs of this widely varying group. It is, of course, recognized that merely keeping a child in school may or may not produce some worthwhile educational result. The longer period of schooling has, as a necessary corollary, the broadening of the school's program and the recognition of the fact that, properly supervised, work itself may be an educational experience, provided always that the welfare of the child is the prepotent consideration.[5]

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[1] Van Denburg, Joseph K. *Causes of Elimination of Students in Public Secondary Schools in New York City.* Contributions to Education, No. 47. New York: Teachers College, Columbia University, 1911. 206 p.

For further references to studies of the various factors responsible see: Book, William F. *Intelligence of High School Seniors.* New York: Macmillan Co., 1922. 371 p.

Feingold, Gustave A. "Intelligence of the First Generation of Immigrant Groups." *Journal of Educational Psychology* 15: 65–82; February, 1924.

Flint, Elsie M. "Freshman Fatalities." *Educational Review* 70: 79–82; September, 1925.

Hopkins, L. Thomas. *The Intelligence of Continuation-School Children in Massachusetts.* Harvard Studies in Education, Vol. 5. Cambridge, Mass.: Harvard College, 1924. 132 p.

Thorndike, Edward L., and Bregman, E. O. "On the Form of Distribution of Intellect in the Ninth Grade." *Journal of Educational Research* 10: 271-78; November, 1924.

Waples, Douglas. "Indexing the Qualifications of Different Social Groups for an Academic Curriculum." *School Review* 32: 537-46; September, 1924.

Palmer, Emily G. *Pupils Who Leave School.* Part-Time Education Series, No. 17. Berkeley, Calif.: Division of Vocational Education of the University of California and of the State Department of Education, 1930. 142 p.

Woolley, Helen T. *An Experimental Study of Children.* New York: Macmillan Co., 1926. 762 p.

Irwin, Elizabeth, and Marks, L. A. *Fitting the School to the Child.* New York: Macmillan Co., 1924.

Cast, G. C. "Elimination of the Unfit: A Problem of Waste in Public Education." *School and Society* 18: 84-87; July 21, 1923.

[2] Koos, L. V. *Op. cit.*, p. 144-45.

[3] Palmer, Emily G. *Op. cit.*, p. 69.

[4] Feingold, Gustave A. "Intelligence and Persistency in High School Attendance." *Op. cit.*, p. 450.

[5] For a good brief statement on this point consult: National Council of Education. *Education and Training.* Washington, D. C.: the Council, 1931. p. 8-10, 26-29, 33-34.

Attracting and holding the child in school is not a simple but a complex criterion of school efficiency. It necessitates successful competition with many distracting forces. The holding power of the school, involving as it does a complicated array of problems reaching into every phase of the school organization from the administrative machinery to the personality of the teacher, may be regarded as an unusually far-reaching indication of the functioning of the school system as a whole. At least one investigator has considered holding power, in and of itself, to be a reliable index of the efficiency of the whole school organization.[1] While no such claim is made for the data relative to the holding power of the forty-eight state school systems presented in Table 7, it is considered a highly important and useful criterion.

While the school organization cannot be held responsible for the removal of all the forces which act to eliminate the child from school at too early an age, an effective school system plans with prudent foresight to build up an organization capable of competing with these forces with a fair chance of success. Those who are responsible for school administration realize that holding a pupil in school after the age of fourteen should depend upon the attraction of the school, the influence of the home and the nature of the child himself quite as much as on the compulsion of the law. By the time the child is fourteen the hold of the compulsory attendance laws begins, in most states, to relax. While the average compulsory age limit is sixteen for the United States as a whole, state laws usually include exemption clauses which make it possible for many children to leave school and go to work after the age of fourteen years. Hence, the selection of the age group from 14 to 17 years, inclusive, as that which most reliably indicates the holding power of the school.

The statistics on holding power given in Table 7 were computed by dividing the total number of pupils in each state, 14, 15, 16, and 17 years of age, who were enrolled in school between September 1, 1929 and April 1, 1930 by the total population of the state at the same age levels. Enrolments *in any kind of school*—public, private, or parochial; full-time or part-time; day schools, night schools, or continuation schools—are included. All data are from the United States Census for 1930. For example, there are 16,216 children 14 to 17 years

TABLE 7—HOLDING POWER OF THE SCHOOLS IN THE AGE-RANGE 14 TO 17 YEARS, BY STATES, 1930

States and territories	Children aged 14, 15, 16, 17 years	Children attending school aged 14, 15, 16, 17 years	Holding power of schools in the age-range 14-17 years	Rank on col. 4
1	2	3	4	5
Continental United States	9,341,221	5,826,235	73.08	.....
District of Columbia	26,099	21,214	81.28	.....
Rhode Island	49,974	31,874	63.78	45
Massachusetts	298,808	228,166	76.36	17
New York	841,331	645,373	76.71	16
New Jersey	295,470	204,848	69.33	35
Illinois	543,701	406,293	74.73	23
California	333,367	298,867	89.65	1
Connecticut	121,355	81,101	66.83	40
Michigan	341,979	267,826	78.32	12
Ohio	468,838	386,403	82.42	7
Pennsylvania	754,579	529,236	70.14	33
Maryland	116,836	71,558	61.25	46
New Hampshire	32,017	23,931	74.74	22
Washington	110,321	95,105	86.21	3
Indiana	231,148	183,218	79.26	10
Wisconsin	224,248	168,470	75.13	21
Utah	43,528	38,842	89.23	2
Delaware	16,991	12,154	71.53	29
Florida	111,830	77,718	69.50	34
Oregon	66,513	55,582	83.57	5
Missouri	261,689	179,134	68.45	37
Colorado	76,446	58,664	76.74	15
Minnesota	197,755	147,039	74.35	24
Texas	480,955	339,693	70.63	32
Maine	56,579	42,982	75.97	18
Louisiana	175,255	111,960	63.88	44
Iowa	183,839	141,575	77.01	14
Kansas	141,200	111,709	79.11	11
Nevada	5,440	4,613	84.80	4
Nebraska	106,779	82,295	77.07	13
Arizona	32,040	22,738	70.97	31
Tennessee	221,339	152,389	68.85	36
Oklahoma	201,665	152,985	75.86	20
Montana	41,991	33,899	80.73	9
Vermont	25,828	18,957	73.40	26
Virginia	208,359	134,914	64.75	42
Wyoming	16,216	13,109	80.84	8
Georgia	270,023	158,015	58.52	48
Kentucky	213,298	140,800	66.01	41
Idaho	37,158	31,000	83.43	6
Alabama	243,591	162,814	66.84	39
West Virginia	144,427	98,281	68.05	38
North Carolina	297,430	191,001	64.22	43
New Mexico	34,874	24,795	71.10	30
South Carolina	173,215	104,337	60.24	47
Arkansas	164,599	118,805	72.18	28
South Dakota	56,986	43,283	75.95	19
Mississippi	181,209	131,050	72.32	27
North Dakota	62,103	45,620	73.46	25
Alaska	.....	.....	.....	.....
American Samoa	873	634	72.62	.....
Canal Zone	.....	.....	.....	.....
Guam	1,559	711	45.61	.....
Hawaii	.....	.....	.....	.....
Philippine Islands	.....	.....	.....	.....
Porto Rico	.....	.....	.....	.....
Virgin Islands	1,615	837	51.83	.....

[1] Witham, Ernest C. "Public School Progress of the States." *American School Board Journal* 75: 37-39; October, 1927.

of age in Wyoming. Of this number 13,109, or 80.8 percent, are enrolled in school.[1]

3. *The quality of teaching provided.* The education provided by a state school system depends primarily upon the kind of teachers employed. Obviously, the more capable the teacher the better the quality of education offered. The influence of the teacher on the school has so long been recognized that it has become proverbial: *As is the teacher so is the school.* It follows, that if accurate data could be secured which would give a clear representation of the teaching ability of the teachers of each state, we would have an unusually reliable criterion of school efficiency. Unfortunately, such data are not available at the present time. Lacking a direct measure of ability of teachers, most educators turn to a measure of the amount of training. Even this measure is not available for all states. However, data on the percent of elementary and secondary school teachers having two or more years of training beyond high school have recently been secured from twenty-nine state departments of education by the Research Division for the purpose of this study. The fact that this information is not available for each of the forty-eight states precludes its use here as one measure of state school efficiency. However, a factor has been selected which bears a close relationship to the amount of training secured by teachers, and for which there is sufficient data from each of the states. This factor is the average annual salary paid teachers, supervisors, and principals.

The relationship between the education of teachers and average annual salary paid in 29 states is shown in Table 8. All states which replied to a request for such information are included in the Table. The coefficient of correlation is $+ .749 \pm .05$ by the Spearman Rank-Difference formula. This relationship is sufficiently high to assure, in most cases, closely similar rankings of the states by average annual salary paid teachers and by amount of training. Nineteen out of the twenty-nine states have a difference in rank between salary and training of five or less places.

Logical considerations support the above statistical evidence to suggest that the amount paid in teachers' salaries strongly influences the type of teacher selected, and thru the teacher, the quality of education provided. In the long run, communities as well as individuals get only what they pay for, in education as in anything else. In order to compete with other professions for the best ability and training it is also necessary to compete with them with respect to monetary rewards. Most teachers cannot afford to invest in training which only brings them inadequate remuneration. The fact that many teaching positions may be secured with only a minimum of training still further decreases the incentive to obtain adequate preparation, but a school system cannot successfully demand a high grade of personal ability and professional training unless it is willing to pay for it. The average annual salary paid to teachers in each state is therefore proposed as a suitable indirect measure of the quality of the instruction provided.

There is a further subtle, but none the less vital, consideration connecting salary and efficiency which applies with special force to the work of teaching. The teacher is inevitably an example as well as a preceptor. His pupils learn from observing him as well as from listening to him. The cultural level of the teacher tends to be reflected in the cultural ideals and standards of his pupils. Cultural level can hardly be separated from the standard of living. A teacher who must wear the cheapest clothing, occupy cramped and unlovely quarters, and spend little or nothing for books, music, and the other amenities of life, cannot bring to his pupils the dignity, the peace of mind, the quiet assurance of one who lives somewhat above the level of merest subsistence. This consideration would apply with greatest force to thousands of teachers in rural and village schools whose salaries are just adequate for the barest necessities of life.

It is recognized that increasing the salaries paid by a school system does not automatically and immediately increase the efficiency of the teachers employed therein; neither does paying a poor teacher more money suddenly transform him into a good teacher. However, it is a matter of common observation that, over a

[1] All of the states received credit for children graduating from school at the midyear promotions in February, even though such graduates did not return to schools of any type thereafter.

The presence of seven-year elementary schools in some states, particularly Georgia, Louisiana, North Carolina, South Carolina, Texas, Virginia and Maryland, probably lessens slightly the comparability of figures on holding power for those states. However, the comparison is not between states with respect to any particular form of school or school organization but rather with respect to the success of each state in maintaining *some form of educational contact* with its children from the fourteenth to the eighteenth birthday.

period of time, an attractive salary schedule has a selective influence. At the same time, increases in salaries have practically always been accompanied by the demand for better qualified teachers. Increase in salaries and higher standards of training are concomitant. Looking at the situation from the viewpoint of the school system, W. H. Gaumnitz of the United States Office of Education says: "It is only reasonable that the schools paying the best salaries should be able to compete more advantageously in the teacher market than those paying poorer salaries. A comparison of salaries may therefore be regarded as a significant index of the quality of education provided."[1]

Cavins compared scores made by pupils on a series of achievement tests in five districts of West Virginia which paid an average yearly salary of $1,335 with those in five districts paying an average yearly salary of $617. He found that, in the districts paying the higher salaries, the children made significantly higher test scores. The correlation between the average salary paid and achievement was positive, and high enough to indicate a substantial relationship between salaries and educational achievement. The author regarded his findings as "tangible evidence that the districts paying the better salaries are getting better teachers."[2]

That other influences than the selective value of teachers' salaries may have been at work is admitted. Nevertheless, it is reasonable to suppose that the better type of teaching service secured by offering a better salary is responsible

[1] Gaumnitz, W. H. *Availability of Public School Education in Rural Communities*. U. S. Department of the Interior, Office of Education, Bulletin, 1930, No. 34. Washington, D. C.: Government Printing Office, 1931. p. 33.

[2] Cavins, Lorimer V., director. *Survey of Education in West Virginia*, Vol. 2. Charleston, W. Va.: State Board of Education, 1928. p. 153.

TABLE 8.—RELATIONSHIP BETWEEN EDUCATION AND SALARIES OF TEACHERS

State	Year to which training data apply	Percent of teachers having 2 or more years of training beyond high school[1]	Average annual salary of teachers, supervisors, principals, in 1929–30[2]	Rank on training	Rank on salaries
1	2	3	4	5	6
Arizona	1928	90[4]	1587[3]	6	6
Arkansas	1930–31	42	673	27	28
Connecticut	1931–32	83	1812	8	3
Delaware	1931–32	82.5	1570	9	7
District of Columbia	1931–32	98.6	2269	1	1
Georgia	1929–30	36	684	28	27
Idaho	1931–32	89	1200	7	13
Illinois	1929–30	65	1630	15	4
Indiana	1931–32	95	1466	3.5	10
Iowa	1928–29	49	1094	21.5	15
Kentucky	1929–30	48.3	896	23	24
Louisiana	1929	73[5]	941	13	20
Massachusetts	1930	94	1875	5	2
Michigan	1931	80	1534	10	9
Mississippi	1930–31	43.4	620	25	29
Missouri	1930	70	1235	14	12
Nebraska	1929–30	50.9	1077	20	16
New Mexico	1930–31	56	1113	18	14
North Carolina	1930–31	74.3	873	12	25
North Dakota	1929–30	52	900	19	23
Pennsylvania	1931–32	97.1	1620	2	5
South Dakota	1931	45	956	24	19
Tennessee	1929–30	43	902	26	22
Texas	1930	77.5	924	11	21
Vermont	1931–32	34	963	29	18
Virginia	1929–30	57.5	861	16	26
Washington	1931–32	95	1556	3.5	8
West Virginia	1930–31	49	1023	21.5	17
Wisconsin	1930–31	56.5	1399	17	11

[1] Data secured direct from state departments of education, unless otherwise noted.

[2] Data on salaries from the Biennial Survey of Education, 1928-30, Office of Education, unless otherwise indicated.

[3] U. S. Department of the Interior, Office of Education. *Biennial Survey of Education, 1926-28*, Bulletin, 1930, No. 16. Washington, D. C.: Government Printing Office, 1930, p. 466.

[4] Arizona. *Ninth Biennial Report for the Period July 1, 1926 to June 30, 1928*. Phoenix, Ariz.: State Department of Public Instruction, 1928. p. 22-23.

[5] Louisiana. *Annual Report for the Session, 1928-29*, Bulletin No. 165. December, 1929. Baton Rouge, La.: State Superintendent of Public Instruction. p. 140-43.

for a share of the difference found by this and by other studies.

Data on the average annual salary paid teachers in each state are from the Biennial Survey of Education for 1928-30.[1] This item is obtained by dividing the aggregate sum paid teachers, principals, and supervisors by the number of teachers, principals, and supervisors employed in the state.

Table 9 gives the average annual salary of teachers by states and the rank of each state with respect to this factor. This item includes public elementary and secondary schools only; data for private schools on a comparable basis are not available.

Certain facts must be frankly recognized in considering the validity of the comparison of teachers' salaries between states as one indirect indication of educational efficiency. In the first place, some time must elapse before the effects of differences in salaries will be reflected in differences in the quality of the teaching force. If a state should suddenly raise or lower the level of economic attractiveness in its teaching positions, it will be some time before the effects of this policy would become evident. The movement of superior teachers from one part of the country to another is not perfectly free. Superior teachers tend to secure the better paid positions but it takes some time to bring this balance about. On the other hand, the very considerable degree of mobility among the teaching population combined with its high annual turnover makes the process of adjustment proceed more rapidly than might at first be expected.

A second consideration involves the question of intelligent and capable selection of teachers. If those who are selecting teachers within a state do their work poorly, a considerable portion of the value of a higher schedule of salaries may be lost. A better salary schedule will not necessarily bring a competent teacher into a school system unless those who are choosing these teachers know how to select the capable from the less capable and consistently do so.

A third objection to the use of salary statistics, as roughly indicative of the kind of teaching service secured, has to do with the varying standards of living and costs of living among the states. That differences exist between rural and urban living costs and between states in different parts of the country is well known. Ideally, the figures for average salary of teachers should be corrected to allow for this difference. Practically, such a correction is im-

TABLE 9—SALARIES PAID TEACHERS, PRINCIPALS AND SUPERVISORS, BY STATES, 1930.

States and territories	Average salary paid teachers, principals, and supervisors	Rank on col. 2
1	2	3
Continental United States	$1,419	.....
District of Columbia	2,269	.....
Rhode Island	1,437	18
Massachusetts	1,875	4
New York	2,493	1
New Jersey	2,113	3
Illinois	1,630	8
California	2,123	2
Connecticut	1,812	5
Michigan	1,534	13
Ohio	1,665	6
Pennsylvania	1,620	9
Maryland	1,518	14
New Hampshire	1,254	21
Washington	1,556	12
Indiana	1,466	16
Wisconsin	1,399	19
Utah	1,330	20
Delaware	1,570	11
Florida	876	41
Oregon	1,612	10
Missouri	1,235	24
Colorado	1,453	17
Minnesota	1,251	22
Texas	924	37
Maine	942	35
Louisiana	941	36
Iowa	1,094	29
Kansas	1,159	27
Nevada	1,483	15
Nebraska	1,077	30
Arizona	1,637	7
Tennessee	902	38
Oklahoma	1,028	31
Montana	1,215	25
Vermont	963	33
Virginia	861	43
Wyoming	1,239	23
Georgia	684	46
Kentucky	896	40
Idaho	1,200	26
Alabama	792	44
West Virginia	1,023	32
North Carolina	873	42
New Mexico	1,113	28
South Carolina	788	45
Arkansas	673	47
South Dakota	956	34
Mississippi	620	48
North Dakota	900	39
Alaska	1,728	.....
American Samoa	444	.....
Canal Zone	1,541	.....
Guam	315	.....
Hawaii	1,812	.....
Philippine Islands	386[1]	.....
Porto Rico	848	.....
Virgin Islands	572	.....

[1] Statistics for 1927-28.

[1] Biennial Survey of Education, 1928-30. *Op. cit.*

possible since there are available no reliable estimates of the comparative costs of living in the several states. The statistics published by the United States Bureau of Labor Statistics and by the National Industrial Conference Board refer to the United States as a whole or to a comparatively small group of selected cities.

In consulting Table 9 some allowance should be made for variations in the cost of living. The most reliable comparisons will be among those states where the cost of living is approximately the same.

4. *The material school environment.* It is reasonable to conclude that, other things being equal, schools providing comfortable and attractive buildings and adequate equipment can produce better results than those having the opposite environmental conditions. Cold, poorly lighted and ill-ventilated rooms are sources of distraction. Absence frequently results from ill health due to unsatisfactory school buildings. Lack of suitable equipment and textbooks impedes progress. It is proverbial that good work depends upon good tools. Teachers and pupils require optimum working conditions in the school room in order to produce optimum results. Furthermore, the school building itself is an educational agency. In a twelve-year schooling the average child will spend at least 12,000 hours in the school environment. If that environment be attractive, esthetic, and worthy of admiration, it can make a definite addition to that child's education. The reverse is also true.

After analyzing the school buildings of the state, the Texas Educational Survey Commission asserts:

"Parents, trustees and teachers do not always realize the effect of the school building and environment upon the physical, mental, and moral development of the child. This effect may be beneficial or injurious depending upon the standards which obtain. Sanitary and hygienic conditions either favor or oppose good health or physical well-being. The arrangement and plan of the building, the kind and quality of furnishings and equipment, and the attractiveness or unattractiveness of the classrooms, corridors, and grounds react upon the mind and attitude of the pupil and either help or hinder him in his efforts to learn. The school and its surroundings are active forces, not always recognized in determining and fixing moral ideals and standards. The kind of building and equipment provided determines in some measure the quality of the teacher's work. Therefore, it is essential that school buildings meeting modern standards be provided in every community so that both teacher and pupil may work to advantage."[1]

Obviously the kind of school environment provided depends to a large extent on the money invested in school property. The skill with which school buildings are planned, constructed, and equipped also contributes to a degree which cannot be exactly determined.

While no definite causal relationship can be statistically proved between the value of school property and the educational results achieved, there is some evidence[2] which suggests that pupils in schools having better buildings and equipment obtain higher scores on standard tests than those attending schools where a minimum amount is expended on the school plant.

In the last analysis, it is possible that the kind of provisions for education found in a school are primarily dependent upon the type of community which supports the school, the more intelligent community providing the better school environment. If this is true, then perhaps the greater achievement shown by pupils in the better school plants is accounted for chiefly by the operation of a selective factor which places the more intelligent groups of pupils in the better school environment. The way in which cause and effect operate in order to associate the well-built and adequately equipped school plant with the greater achievement of the pupils is not of primary concern to this study. The fact that the two are usually concomitant plus the logical considerations already presented, is considered of sufficient importance to justify the use of the value of school property per pupil enrolled as a measure of school efficiency. It is necessary to assume, of course, that school officials are using reasonable care to get value received for every dollar expended for school buildings and equipment. To the extent that money may be wasted in this direction, the criterion loses its validity.

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[1] Works, George A. *Texas Educational Survey Report*, Vol. 1. Austin, Texas: Texas Educational Survey Commission, 1925. "Organization and Administration." p. 407.

[2] For a review of studies made on this problem see: Covert, Timon. *Educational Achievement in One-Teacher and Larger Rural Schools.* U. S. Department of the Interior, Bureau of Education, Bulletin, 1928, No. 15. Washington, D. C.: Government Printing Office, 1928. 23 p.

The value of public school property, including buildings, sites, and equipment of all kinds, is collected biennially by the U. S. Office of Education. The figures secured from the several states are, of course, estimates of varying accuracy. The Office gives the following explanation of this item in the report form sent to the state departments of education.

Value of school property—There are three plausible bases on which the value of school property may be estimated: (1) original cost of the building, (2) replacement value, and (3) present value. To secure uniformity in reports it is suggested that the original cost of school property be reported. The replacement value, that is, what it would cost to replace the present building, does not represent the true and actual value of such property and does not represent the original cost to the taxpayer. Furthermore, such values are largely gross estimates. The present value of school property is likely to be a mere guess, since, if such property were sold for commercial use, it might bring considerably more or less than its present value for school purposes. The original cost is, therefore, the most accurate value, is the most easily secured, and represents what a given building cost the community. The original cost, however, does not take depreciation into account, but in many instances this factor is offset by appreciation, or increased value in school lots or even in school building. To secure accurately the value of depreciation and appreciation is practically impossible and is not contemplated in this section of the schedule.[1]

The value of public school property per pupil enrolled is calculated by dividing the total estimated value of public school property in each state by the number of pupils enroled in public elementary and secondary schools. Table 10 gives for each state the average value of public school property per pupil enrolled in public schools and the rank of each state. Private school properties are not included.

5. *Percent of literacy.* The very minimum acceptable achievement for a state school system would certainly include the ability to read and write on the part of every youth and adult in the population. This is indeed a very low educational goal. However, many of the states have yet some distance to go before they can achieve it. The percent of literacy reflects not merely the available amount of education generally offered throughout the state but also the minimum amount of education offered to its most remote and handicapped citizens.

Since, however, some of the states receive a large immigration with an unusually high de-

TABLE 10—VALUE OF PUBLIC SCHOOL PROPERTY PER CHILD ENROLLED, BY STATES, 1930

States and territories	Value of school property per child enrolled	Rank on column 2
1	2	3
Continental United States	$242	.....
District of Columbia	373	.....
Rhode Island	275	13
Massachusetts	320	8
New York	407	1
New Jersey	370	3
Illinois	316	9
California	400	2
Connecticut	349	4
Michigan	349	5
Ohio	321	7
Pennsylvania	264	15
Maryland	201	31
New Hampshire	249	20
Washington	243	21
Indiana	240	22
Wisconsin	301	10
Utah	215	28
Delaware	267	14
Florida	230	26
Oregon	257	17
Missouri	231	25
Colorado	258	16
Minnesota	288	12
Texas	158	36
Maine	211	30
Louisiana	127	39
Iowa	222	27
Kansas	214	29
Nevada	326	6
Nebraska	252	19
Arizona	173	35
Tennessee	86	44
Oklahoma	132	37
Montana	253	18
Vermont	190	33
Virginia	120	41
Wyoming	301	11
Georgia	72	48
Kentucky	82	46
Idaho	199	32
Alabama	89	42
West Virginia	189	34
North Carolina	127	38
New Mexico	123	40
South Carolina	88	43
Arkansas	84	45
South Dakota	239	23
Mississippi	74	47
North Dakota	236	24
Alaska	323[1]	.....
American Samoa	19[2]	.....
Canal Zone	46[1]	.....
Guam	29	.....
Hawaii	183	.....
Philippine Islands	21	.....
Porto Rico	47	.....
Virgin Islands	27	.....

[1] Property values for 1927-28 divided by enrolment for 1929–30

[2] Statistics for 1927.

[1] See U. S. Bureau of Education Statistical Circular No. 10, entitled, "Items of Statistics for Public School Systems with special reference to reports to the United States Bureau of Education."

gree of illiteracy, it seems advisable to limit the statistics presented here to native-born persons of ten years of age and over. These figures are open, theoretically, to the objection that a certain number of illiterate native-born persons are now residing in a state other than that in which they spent their childhood and youth. No complete figures exist on the extent of this state-to-state migration of illiterates. It is probably relatively small and certainly is partly compensated for by migration in the opposite direction.

Statistics are given in Table 11 for white and colored races separately and for the general population of the state as a whole. The ranking of the states is on the percent of literacy among the general native-born population over ten years of age. The separate figures for the colored and white races are included so that, in those states with a large percentage of colored population, a comparison may, if desired, be made for the white population alone. It may be noted, however, that the ranking of most of the states would not be materially altered if the colored population were excluded from consideration, although the actual percent of literacy would, of course, be higher.

Review of the Standing of the States

The present standing of the forty-eight states on five factors related to school efficiency has been given in Tables 6, 7, 9, 10, and 11, and in Charts I to V. The ranks of the states are summarized for convenience in Table 12.

The aim has been, primarily, to present the facts in a way that will permit the reader to interpret them for himself. It is not within the province of this Bulletin to discuss in detail the standing of the states on these five factors, nor to attempt a systematic account for differences in rank.

However, the tables and charts have been arranged to show the relationship between the rank of the states on each of the five factors selected and two other factors. The first is that of population distribution; the second relates to geographical differences.

The relationship between each of the five factors and population distribution is shown in the tables. In each table the states have been arranged according to the proportion of popu-

TABLE 11—PERCENT OF LITERACY OF NATIVE BORN POPULATION, BY STATES, 1930

States and territories	Percent of literacy among persons over 10 years of age			
	In the native-born white population	In the Negro population[1]	In the total population[2]	Rank in literacy
1	2	3	4	5
Continental United States	98.5	83.7	96.89	.....
District of Columbia	99.8	95.9	98.68	.....
Rhode Island	99.3	91.9	99.14	25
Massachusetts	99.6	94.6	99.52	13
New York	99.5	97.5	99.41	16
New Jersey	99.5	94.9	99.19	24
Illinois	99.4	96.4	99.25	21
California	99.7	96.9	99.67	7
Connecticut	99.6	95.1	99.51	15
Michigan	99.5	97.0	99.38	17
Ohio	99.3	93.6	98.99	27
Pennsylvania	99.4	95.8	99.21	22
Maryland	98.7	88.6	96.89	34
New Hampshire	99.2	96.1	99.20	23
Washington	99.7	97.1	99.69	6
Indiana	99.1	94.0	98.87	28
Wisconsin	99.4	95.6	99.36	19
Utah	99.7	96.8	99.71	4
Delaware	98.8	86.8	97.00	33
Florida	98.1	81.2	92.86	39
Oregon	99.7	97.5	99.70	5
Missouri	98.5	91.2	98.03	31
Colorado	99.2	96.1	99.12	26
Minnesota	99.6	98.0	99.56	12
Texas	98.6	86.6	96.54	35
Maine	98.4	95.2	98.41	30
Louisiana	92.7	76.7	86.65	47
Iowa	99.6	94.6	99.51	14
Kansas	99.5	94.1	99.29	20
Nevada	99.8	98.5	99.76	1
Nebraska	99.6	96.1	99.57	11
Arizona	99.5	96.0	99.36	18
Tennessee	94.6	85.1	92.82	40
Oklahoma	98.3	90.7	97.69	32
Montana	99.7	95.4	99.72	3
Vermont	98.7	95.1	98.69	29
Virginia	95.2	80.8	91.31	42
Wyoming	99.7	95.8	99.72	2
Georgia	96.7	80.1	90.55	43
Kentucky	94.3	84.6	93.43	37
Idaho	99.6	95.8	99.63	9
Alabama	95.2	73.8	87.42	45
West Virginia	96.3	88.7	95.79	36
North Carolina	94.4	79.4	90.03	44
New Mexico	92.3	94.0	92.30	41
South Carolina	94.9	73.1	85.06	48
Arkansas	96.5	83.9	93.19	38
South Dakota	99.6	97.8	99.64	8
Mississippi	97.3	76.8	86.97	46
North Dakota	99.6	96.6	99.57	10
Alaska	.....	.....	.....	.....
American Samoa	.....	.....	.....	.....
Canal Zone	.....	.....	.....	.....
Guam	.....	.....	.....	.....
Hawaii	.....	.....	.....	.....
Philippine Islands	.....	.....	.....	.....
Porto Rico	.....	.....	.....	.....
Virgin Islands	96.2	83.0	83.87	.....

[1] The Bureau of Census does not give separate figures for native and foreign-born negroes. Practically all are native born.
[2] Except foreign-born white persons.

lation which is urban.[1] The state having the highest percent of urban population (Rhode Island) is listed first, while the state having the smallest percent of urban population and the largest percent of rural population (North Dakota) is listed last.

TABLE 12—STANDING OF THE STATES ON FIVE FACTORS RELATED TO SCHOOL EFFICIENCY, 1930

States	Rank of the States[1] for 1930 in:				
	Amount of attendance	Holding power	Teachers' salaries	Value of school property	Literacy
1	2	3	4	5	6
Rhode Island[2]	22	45	18	13	25
Massachusetts	2	17	4	8	13
New York	3	16	1	1	16
New Jersey	8	35	3	3	24
Illinois	7	23	8	9	21
California	6	1	2	2	7
Connecticut	9	40	5	4	15
Michigan	1	12	13	5	17
Ohio	5	7	6	7	27
Pennsylvania	20	33	9	15	22
Maryland	27	46	14	31	34
New Hampshire	10	22	21	20	23
Washington	21	3	12	21	6
Indiana	13	10	16	22	28
Wisconsin	14	21	19	10	19
Utah	12	2	20	28	4
Delaware	18	29	11	14	33
Florida	39	34	41	26	39
Oregon	28	5	10	17	5
Missouri	15	37	24	25	31
Colorado	30	15	17	16	26
Minnesota	17	24	22	12	12
Texas	40	32	37	36	35
Maine	4	18	35	30	30
Louisiana	42	44	36	39	47
Iowa	11	14	29	27	14
Kansas	26	11	27	29	20
Nevada	19	4	15	6	1
Nebraska	24	13	30	19	11
Arizona	35	31	7	35	18
Tennessee	38	36	38	44	40
Oklahoma	36	20	31	37	32
Montana	16	9	25	18	3
Vermont	25	26	33	33	29
Virginia	37	42	43	41	42
Wyoming	29	8	23	11	2
Georgia	46	48	46	48	43
Kentucky	41	41	40	46	37
Idaho	33	6	26	32	9
Alabama	45	39	44	42	45
West Virginia	32	38	32	34	36
North Carolina	43	43	42	38	44
New Mexico	34	30	28	40	41
South Carolina	48	47	45	43	48
Arkansas	44	28	47	45	38
South Dakota	23	19	34	23	8
Mississippi	47	27	48	47	46
North Dakota	31	25	39	24	10

[1] For full description of terms, see the discussion in connection with Tables 6, 7, 9, 10, and 11.
[2] Consult footnote 1, page 114

Geographical differences among the states with respect to the five factors are presented in Charts I-V. The forty-eight states have been divided into four major groups according to rank. The twelve highest ranking states appear white on the charts; the second twelve in rank are stippled; the third twelve are single-hatched and the last twelve in rank are solid black.

The data on attendance, Table 6, illustrates strikingly the relationship between ruralness and attendance. The nine states ranking highest on urban population also rank highest on attendance with one exception, Rhode Island, which ranks first in percent of urban population and twenty-second on attendance. The ten most rural states, on the other hand, show a decided falling-off in attendance. The relationship between these two factors is further indicated by their correlation coefficient which is $+ .750 \pm .04$.[2]

Geographical differences in amount of school attendance are presented graphically in Chart I. The states ranking in the first and second quarter are, in general, the Northeastern, Central and Western. The Southern states rank lowest on attendance.

The success of a state school system in holding pupils in school between the ages 14 and 17, as shown in Table 7, does not appear to be closely related to the proportion of urban or rural population. Correlating the ranks of the states on percent of urban population with their ranks on holding power yields a coefficient of only $+ .208 \pm .09$. The large probable error renders this small coefficient insignificant. However, Chart II shows two pronounced sectional differences. Eight of the twelve states ranking highest on holding power are grouped together in the western and northwestern parts of the United States, while most of the states ranking lowest are located below the Mason and Dixon line in the southeastern half of the country.

A close relationship is found between average annual salary paid teachers, principals, and supervisors, and percent of urban population.

[1] Urban areas, as defined by the 1930 Census, are incorporated places having 2,500 or more inhabitants; also townships and other political subdivisions (not incorporated as municipalities, nor containing any areas so incorporated) which have a total population of 10,000 or more and a population density of 1,000 or more per square mile. In order to cover exceptional incorporation practices in the northeastern section of the country, only those towns are classified as urban in which there is a village or thickly settled area of more than 2,500 inhabitants and comprising, either by itself or when combined with other villages within the same town, more than 50 percent of the total population of the town.

[2] All correlations in connection with these tables have been calculated by the Spearman Rank-Difference formula.

Table 9 shows that the first nine states in percent of urban population also rank highest on salary with two exceptions, Rhode Island and Michigan. The eighteen most rural states have, with but one exception, less than the median rank on salaries: Wyoming has a rank of 23, one less than the median. The coefficient of correlation between rank on percent of urban population and salaries is $+ .812 \pm .03$, also indicating a close relationship.

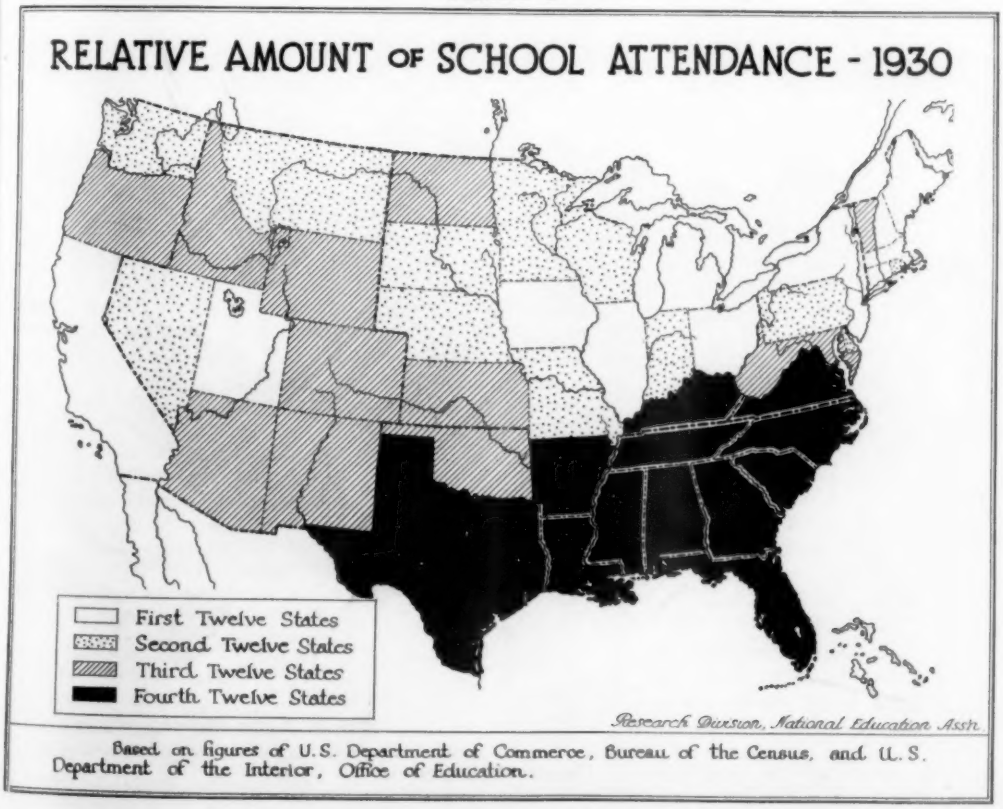
Chart III shows sectional differences in average annual salaries paid teachers, principals, and supervisors. While there is a certain amount of random scattering throughout the various sections of the country, it is clear that the Western, Central and most of the Middle Atlantic and New England states are above the median rank on salaries, while eleven out of the twelve lowest ranking states are in the southern sections of the country. It would be highly desirable to correct the data on salaries for cost of living in the various states and sections of the country. Unfortunately, this is not possible at the present time because comparable data on the cost of living are not available.

A high degree of relationship also exists between percent of urban population and value of school property per child enroled, according to the data presented in Table 10. The nine highest ranking states on percent of urban population include eight of the nine states ranking highest on value of school property per child enroled. In general the most rural states show a decrease in rank in value of school property. The data show a wide range between the highest and lowest values, from $407 to $72 per child enrolled.

The coefficient of correlation between rank on percent of urban population and value of school property per child enrolled is $+ .742 \pm .04$, indicating a high degree of relationship between the two factors.

Reference to Chart IV shows the twelve highest ranking states on value of school property to be widely scattered over the country, but all states above the median rank are located in the Western, Central, Northern and Northeastern sections, while all of the last

CHART I



Based on figures of U.S. Department of Commerce, Bureau of the Census, and U.S. Department of the Interior, Office of Education.

twelve in rank are located in the southern half of the country, both eastern and western sections.

The relationships between literacy and percent of urban population, as shown in Table 11, is not so evident. However, few of the states have more than ten percent of illiteracy among native-born inhabitants. In the state ranking lowest in literacy (South Carolina), 85.06 percent of the native population is literate; in the state ranking highest (Nevada), 99.76 percent of the native population is literate, leaving a range of only 14.7 percent between the two. Furthermore, thirty-six of the forty-eight states have a literate population which is between 95.79 percent and 99.76 percent of the total population, indicating a relatively small difference between these states with respect to literacy.

The coefficient of correlation between percent of urban population and literacy, as presented in Table 11, is $+ .319 \pm .08$, a barely significant correlation.

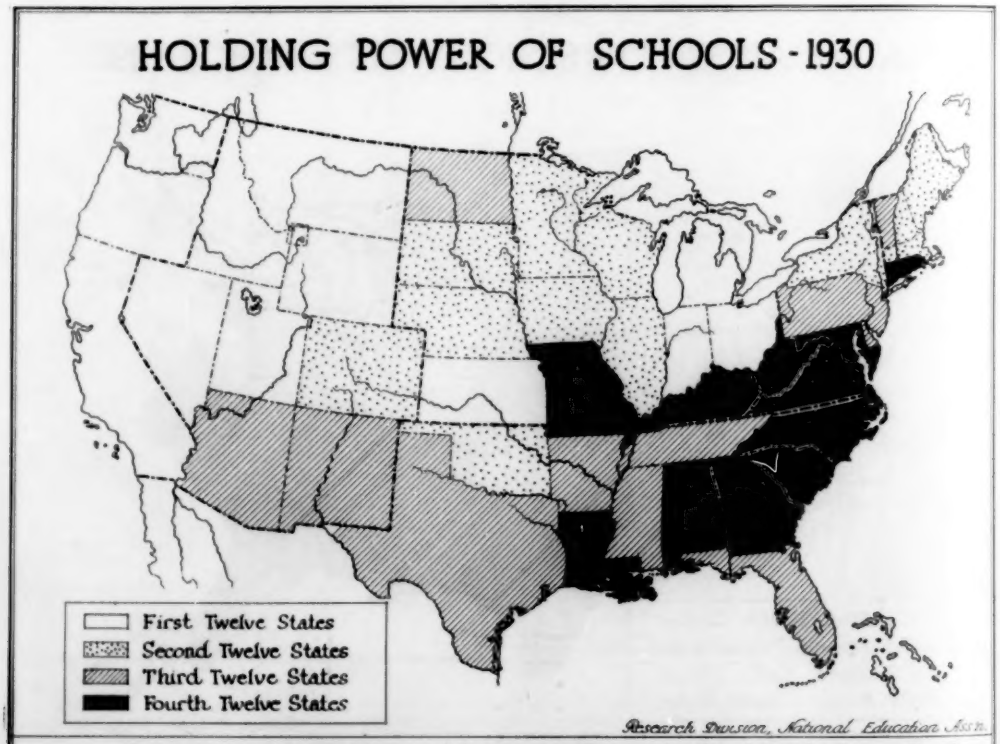
However, even within the limited range of difference between the least literate and the most literate states, sectional differences are clearly discernible. The twelve highest ranking states are grouped together in the Northern half of the country between the Mississippi River and the Pacific coast. The twelve states ranking lowest are in the southern half of the country, with the largest proportion in the eastern section.

Estimating School Efficiency in the Future

This review of the tools and procedures available for estimating state school efficiency encourages an optimistic outlook for future progress. Much careful and valuable work has been done and a great deal more is under way. One who would evaluate the effectiveness of a state school system has a wide variety of methods at his disposal.

It is true that these methods are not completely understood nor universally accepted;

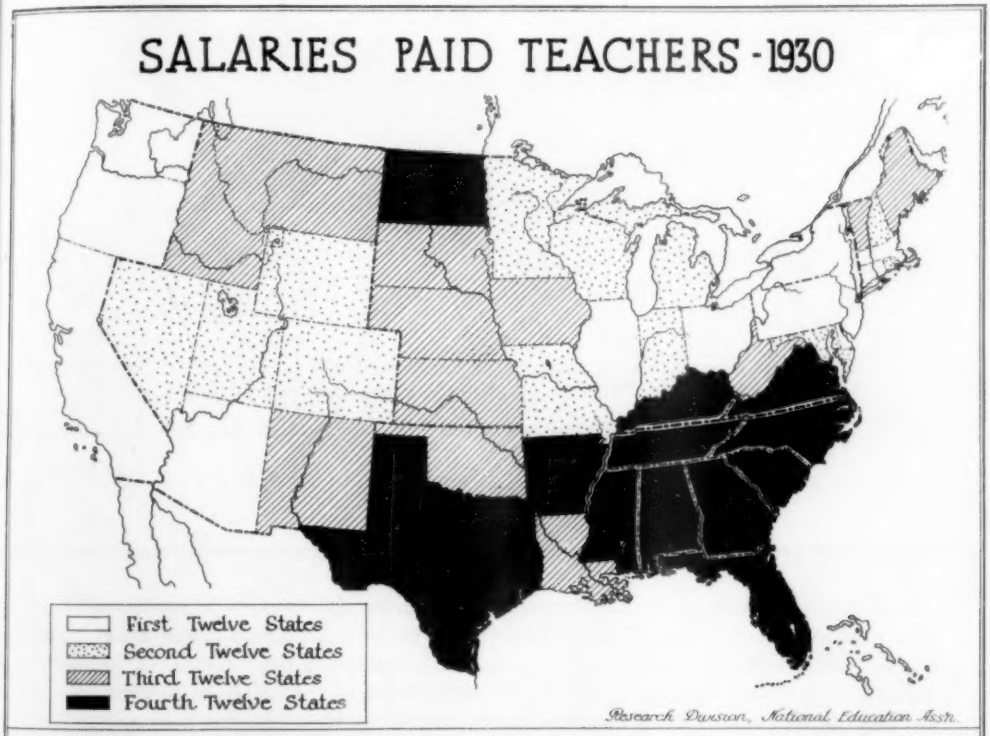
CHART II



Based on number of children 14 to 17 years of age who attended school, according to figures of the U.S. Department of Commerce, Bureau of the Census.

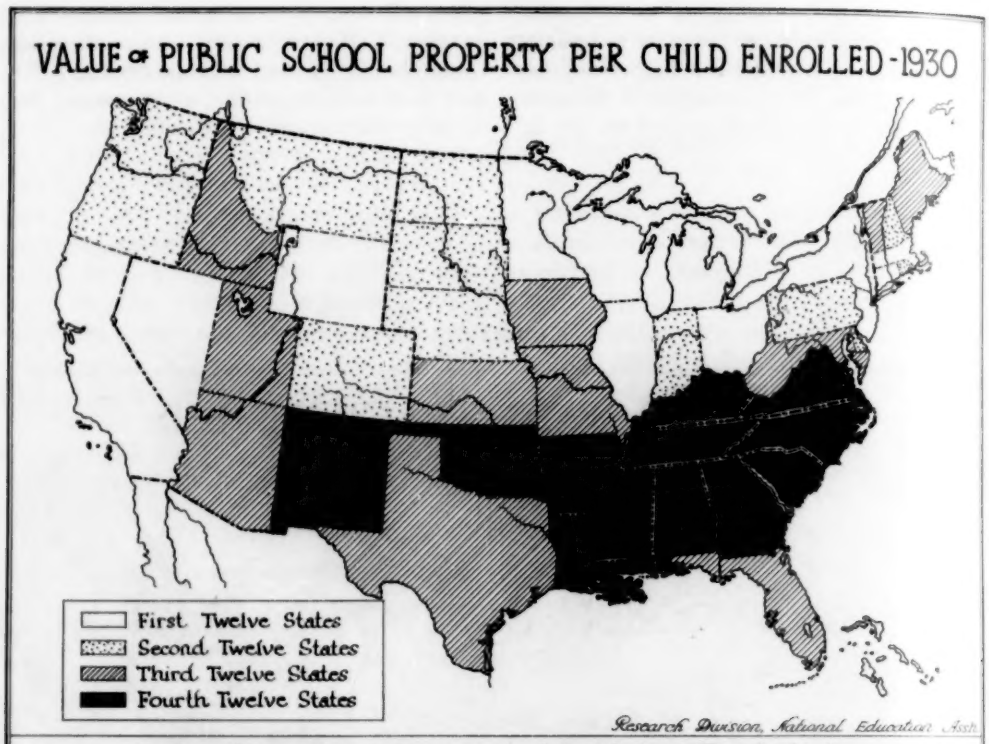
true, also, that the coordination of these methods into a unified attack on the problem is still lacking. But the evaluation of state school efficiency is far better organized than was psychological research a half century ago, before Wilhelm Wundt took the first tentative steps toward the organization of a psychological laboratory. It has far more technics at its disposal than Alfred Binet had twenty-five years ago when the government of Paris requested him to find an objective basis for determining feeble-mindedness. It has far more enlightened support than J. M. Rice had thirty years ago when school superintendents condemned his suggestion that practical use could be made of objective tests of spelling ability. The task of accurately evaluating state school efficiency is complex and difficult. Yet, in the light of what has already been accomplished in this and in related fields, only a very bold and pessimistic prophet would dare to assert that the task is impossible.

CHART III



Based on average annual salary paid teachers, principals, and supervisors, according to figures of the U. S. Department of Interior, Office of Education.

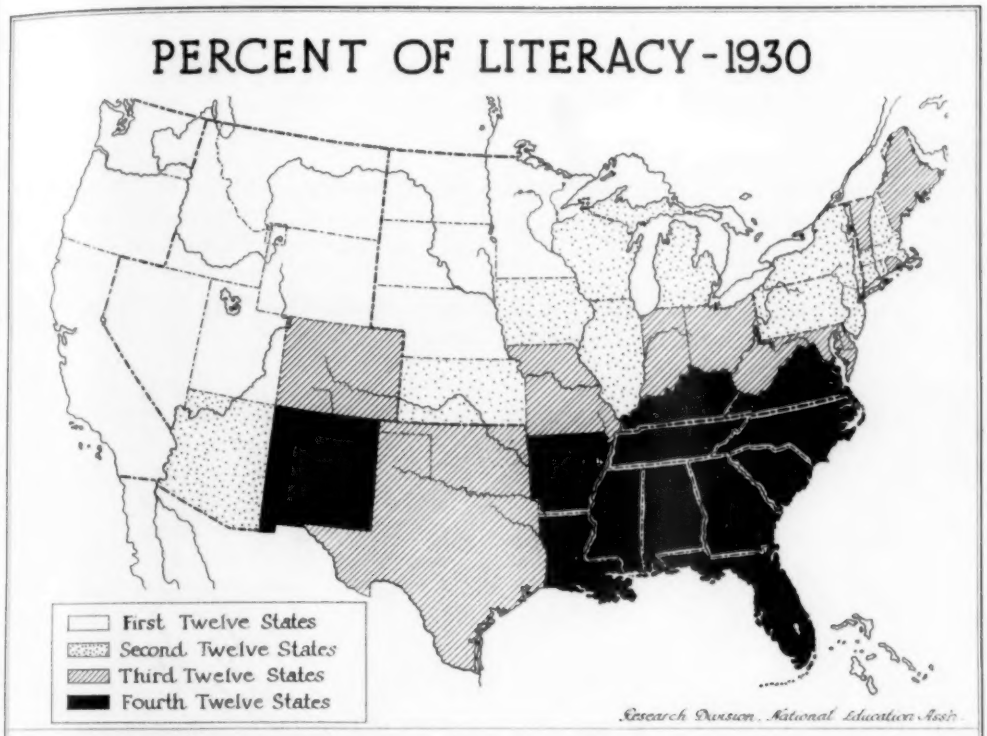
CHART IV



Based on figures of the U.S. Department of the Interior, Office of Education.

Financial, sanitary, and educational considerations justify the assumption of some degree of state leadership and control in the matter of schoolhouse construction. The best investment in school plants also means the provision of the safest, most healthful school buildings and equipment and the best adaptation of the buildings to the needs of children as formulated by a progressive educational outlook. In order to assume the proper measure of leadership and control over school buildings the state should provide for the inclusion of a division of schoolhousing in its department of education. The precise function of such a division will vary from state to state. *Research Bulletin, National Education Association, May, 1930. p. 142.*

CHART V



Based on the percent of literacy among the native white and negro population 10 years of age and over, according to figures of the U.S. Department of Commerce, Bureau of the Census.

Illiteracy is a national liability and a national menace. No American citizen, no matter what his color, what his occupation, or what the land of his birth, can, with safety to our social order, be merely "hands and feet to fetch and carry." The fundamental problem that now confronts us is to raise the common man not so much to a greater degree of skill and industrial efficiency as to those higher planes of thinking, feeling, and social action which the complexity and interdependence of life demand. This can be accomplished through education and only through education.—*George D. Strayer, Addresses and Proceedings of the Sixty-Third Annual Meeting of the National Education Association, 1925. p. 158.*

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FOREWORD

In 1762 Rousseau wrote: "Everything is good as it comes from the hand of the Author of nature, but everything degenerates in the hands of man." He was striking at a society that permitted its children to grow up amid poverty, vice, and disease—and then blamed the children for their unsocial behavior.

This emphasis upon the responsibility of the social group for the behavior of each individual has been lost sight of many times since Rousseau. We have so frequently given our attention to *what* an offender has done instead of trying to discover *why* he did it. We have been too willing to shift to the individual the blame for shortcomings of the group.

Horace Mann did not make this mistake. In his report of 1847 he wrote: "If any given percentage of all children can be rescued from vice and crime, and can be so educated and trained as to become valuable citizens, but the State refuses or declines to do this work, then the State itself becomes a culprit."

Recently the White House Conference on Child Health and Protection has passed on the torch in these words: "For every child a community which recognizes and plans for his needs, protects him against physical dangers, moral hazards, and disease; provides him with safe and wholesome places for play and recreation; and makes provision for his cultural and social needs."

The criticism heard sometimes today that education has failed to prevent crime is but another way of saying with Horace Mann that "the State has become a culprit." Schools can only be as good as the citizens are willing to demand and to support. Inadequate provision for schools in times of prosperity and retrenchment in periods of depression contribute to maladjustment, delinquency, and crime among our youth.

This latest publication of the Research Division shows the need for aggressive action with certain problems, and cautious general conclusions with all action. The delinquency which we see today is but a symptom of deep-rooted social pressures and stresses. It will take the united effort of the home, the school, the government, and other social agencies to alleviate the fundamental maladjustments.

Teachers, principals, and superintendents will find in this bulletin the basis for many profitable conferences. Parents, police officials, and social workers may find herein suggestions for cooperative action with the schools.

If this period of history is "a race between civilization and catastrophe"—then education must not fail. The teacher is the savior of the people.

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

Introduction

Today, crime is a topic for conversations, conferences, and conventions. Theories as to causes of crime are advanced, discussed, ridiculed, and dropped. Statistics are cited, criticized, revised, and finally filed. Almost everyone has a remedy or an explanation to offer.

Out of the swirl of contention and counter statement there are gradually formed certain "stereotypes" or generally accepted beliefs.[1]

Some Typical Stereotypes or Beliefs

A number of "beliefs" have formed in connection with crime conditions. These widely accepted viewpoints have been both supported and denounced by experts. The points of contention may be illustrated by these three questions: (1) Is crime increasing? (2) Are criminals younger today? (3) Does education cause crime?

Is crime increasing?—The amount of crime and its tendency to decrease or to increase have long been subjects of heated discussion. Louis Seibold[2] made the following statement in 1926:

> All federal, state, and municipal reports show that crimes of violence have been steadily increasing in the United States since 1900.

Philip Parsons,[3] also writing in 1926, has taken a somewhat different stand:

> In fact, with all the data available up to 1922, there is a serious question whether there is actually an increase in the amount of crime out of proportion to the increase of population.

Although both of the statements were made in 1926, the debate continues today. Disagreement arises, first, because arguments are based upon too few facts. Figures are used for such limited areas and such short periods of time that the results do not fairly represent conditions. In the second place, many of the available statistics are not comparable because the terms and the procedures used in assembling the data are not standardized. Third, looseness in the use of terms leads to further argument.[4]

Are criminals younger today?—It is widely believed that criminals today are younger than those who committed similar crimes ten, twenty, or thirty years ago. The evidence cited on this point is often taken from the figures of the federal Bureau of the Census. For example, Hon. Ellen C. Potter,[5] Secretary of Welfare of Pennsylvania, made the following statement:

> Comparing the percent distribution of commitments by age for 1910 and 1923, we find an increase of 3.7 percent in the group under thirty-four years of age.

In a 1930 bulletin[6] of the U. S. Children's Bureau, the data cited from the federal census show that in 1923 the percent (54.4 of male prisoners) between the ages of eighteen and thirty-four years was the same as in 1910. From other data the bulletin concludes:

> Institution commitments, therefore are only one of the indexes of the extent of crime which should be available. For the period 1910 to 1923 they indicate in all age groups a decreasing number of delinquents and criminals committed to correctional institutions.

There appears to be some discrepancy in the two statements cited above in spite of the fact that both are based upon federal census statistics. Perhaps the difference may be due to the number of women committed. The first statement implies that it includes both men and women, the second statement applies only to male prisoners. However, the point should be clear that general statements based upon the same evidence are often misleading when removed from the original context.

Does education cause crime?—It is sometimes asserted that education today is producing "educated" criminals. Even more common is the statement that the public schools develop

---

[1] Lippmann, Walter. *Public Opinion.* New York: Macmillan Co., 1927. p. 89.

[2] Seibold, Louis. "Crime Increase Steady in U. S. since 1900, All Records Show." *Evening Star.* Washington, D. C., September 8, 1926. p. 3.

[3] Parsons, Philip A. *Crime and the Criminal.* New York: Alfred A. Knopf, 1926. p. 143.

[4] In 1926, the Children's Bureau of the United States Department of Labor inaugurated a plan for uniform statistics on juvenile delinquency. The Bureau of the Census and other federal agencies have cooperated with local officers in preparing more exact statistics on prisons and criminals.

[5] Potter, Ellen C. "Spectacular Aspects of Crime in Relation to the Crime Wave." *The Annals* 125: 14; May, 1926. Philadelphia: American Academy of Political and Social Science.

[6] United States Department of Labor, Children's Bureau, *Youth and Crime.* Publication No. 196, 1930. p. 3.

persons who are irreligious and lawless. In commenting upon a public address by Mr. Wickersham, a Newark editor[1] wrote:

> How does it happen that criminal tendencies are gaining so rapidly at a time when the nation is spending staggering sums on education? Is it possible that the modern school, emphasizing the creative impulses and personality of the pupils, unwittingly fosters in them a reckless, anarchistic spirit that breeds lawbreaking?

A general answer to the questions raised by the Newark editor is given in another newspaper statement:[2]

> Education does not offer a guarantee against crime and poverty, but it has been proved to be valuable in reducing this tendency of youth to go wrong.

Other quotations might be given to illustrate the opinions of those who criticize and praise education. For present purposes the two quotations are sufficient to show two more or less opposing viewpoints. Elsewhere this bulletin will present objective evidence on the question.

Other Questions of Interest to Educators

In addition to the general "beliefs" cited above, the educator is genuinely concerned with many specific relationships between crime and education. For example:

1. What are the most common types of crimes, and are these amendable by education?
2. How can teachers identify the children who are potential delinquents and criminals?
3. What factors, or so-called causes, are associated with criminal behavior?
4. What are the comparative costs of crime and education?
5. How can the various social forces, particularly the schools, prevent juvenile delinquency and criminal behavior?

Purposes and Organization of the Bulletin

It is expected that this bulletin will provoke discussion in educational circles. It should do something toward silencing loose and critical talk about the schools. It should show that crime is more than a school problem. It should point the way for schools to prevent crime by dealing more effectively with so-called "problem" children.

The bulletin is divided into seven major parts as follows:

Part I. Statistics on Crime—This section reviews the status of statistics on crime showing that existing data must be used and interpreted with caution.

Part II. Crime Costs and School Expenditures—A summary of crime costs by the National Commission on Law Observance and Enforcement compared with data as to the cost of public education.

Part III. Factors Associated with Crime—A general treatment of the so-called causes of crime.

Part IV. The Problem of the Delinquent Child—A review of objective evidence on the maladjustments of juveniles.

Part V. The Social Agencies of Crime Prevention—A general statement of the need for judicial reforms, better schools, enlightened public opinion, health programs, and other social means for crime prevention.

Part VI. Organizations Interested in Crime Prevention—A list of national committees and associations that are helping to correct and to prevent social maladjustments.

Part VII. Selected Bibliography—A selected list of references dealing with the major problems treated in the bulletin.

Acknowledgments

In the preparation of this bulletin the Research Division has drawn upon the investigations of numerous individuals and groups. One of the most useful sources of information has been the reports of the so-called Wickersham Commission, officially designated as the National Commission on Law Observance and Enforcement. Publications of the U. S. Office of Education, the Children's Bureau, the Bureau of Prisons, and the Bureau of the Census have been utilized extensively. The reports of the New York and Chicago crime commissions have been helpful.

The writings of so many individual penologists, social workers, teachers, and others have been used so as to make it impossible to give specific acknowledgments other than those found in the footnotes. Special appreciation is expressed to the following persons for reading the manuscript and making important criticisms: Katharine F. Lenroot, Acting Chief, U. S. Department of Labor, Children's Bureau; Marjorie Bell, Field Secretary, National Probation Association; Lewis E. Lawes, Warden, Sing Sing Prison; and Sanford Bates, Director, U. S. Department of Justice, Bureau of Prisons.

The Research Division assumes responsibility for the bulletin in its general interpretations other than those quoted fully from other publications.

[1] Quotation from the *Newark (N. J.) Call* as reprinted in *School Executives Magazine* 50: 566; August, 1931.
[2] Quotation from the *Hornell (N. Y.) Tribune-Times* as reprinted in *School Executives Magazine* 50: 567; August, 1931.

PART I

Statistics on Crime

Newspaper accounts, magazine articles, and public speeches fairly bristle with statistics on crime. These figures, cited to give an impression of authority, often reflect upon the school's effectiveness in developing good citizens. Since teachers are at a disadvantage because of the naïve use and uncritical acceptance of statistics on crime, it is advisable at this point to treat the topic briefly. It will be shown that, since existing statistics are incomplete and unstandardized, they are commonly misinterpreted.[1]

What Is a Crime?

Reduced to simplest terms, a crime is an act in violation of any law. A man who drives his car at thirty miles an hour in a twenty-mile zone is a criminal. Arrest, trial, and conviction taken separately or together are not necessary to change "lawbreaking" into a criminal act. More technically, a crime may be defined as follows:

> A crime is an act believed to be of such serious consequence to the well-being of society or of the public at large, and to affect so adversely the interests or the life of the state, that it has been brought within the cognizance of the law and there specifically prohibited—generally with a penalty prescribed for its commission. Likewise the omission of an act expressly enjoined by the law constitutes a crime.[2]

It should be noted that a crime as defined above is not necessarily an anti-social, or immoral act. It is simply an act forbidden by law. Warden Lawes of Sing Sing Prison has written on the general point: "Right and wrong in a religious and moral sense are not identical with right and wrong in a lawful sense—a 'right' act morally may be a 'wrong' (criminal) act legally and, of course, vice versa."[3]

Classification of Crimes and Criminals

Crimes may be classified in accordance with the seriousness of the criminal act or the motive of the offender.

On the atrocity basis crimes are usually classified as felonies or misdemeanors. The offenders are usually called felons and misdemeanants respectively. Although, in the popular mind, felons are more dangerous to society than misdemeanants, a comparison of the laws of the forty-eight states shows that misdemeanors of one political area are often considered as felonies in nearby states. This vagueness and difference led an investigator in 1918 to conclude that "there is nothing inherent in an offense which makes it a misdemeanor or a felony."[4] In other words, the law of a specific political area, not the nature of the offense, determines whether an act is a felony or a misdemeanor.

An illustration of a classification based upon the motives of the offender is as follows: economic crimes, sexual crimes, political crimes, and miscellaneous (chiefly crimes of vengeance).[5] Since many crimes have several motives, this basis of classification is never entirely satisfactory.

For statistical purposes the United States Bureau of the Census uses the main divisions of (1) offenses against the person (e. g., homicide), (2) crimes against property (e. g., theft), (3) crimes against sex morality (e. g., bigamy), (4) violations of drug laws, (5) violations of liquor laws, and (6) miscellaneous (including crimes unknown as to types).[6]

What Is Juvenile Delinquency?

The term *crime* is often used to designate immoral acts which are not contrary to law. This misuse of a legal term thwarts attempts at clear thinking. In the same way the word *delinquency* is carelessly applied to those who are merely naughty, when it should be restricted to juveniles who have become seriously maladjusted. Lenroot[7] has defined the term as follows:

---

[1] Important references when cited in incomplete form in footnotes are given fully annotated in the bibliography at the end of this bulletin.

[2] Best, Harry. *Crime and the Criminal Law in the United States.* New York: Macmillan Co., 1930: p. 3.

[3] Lawes, Lewis E. *Life and Death in Sing Sing.* Garden City, N. Y.: Doubleday, Doran and Co., 1928. p. 21.

[4] Queen, Stuart Alfred. *The Passing of the County Jail.* p. 75.

[5] Bonger, William Adrien. *Criminality and Economic Conditions.* p. 536-37.

[6] For example, Table 34 of *The Prisoner's Antecedents,* Bureau of the Census, U. S. Department of Commerce, 1929. p. 52.

[7] From an unpublished special report for the National Commission on Law Observance and Enforcement, prepared by Katharine F. Lenroot of the Children's Bureau, October, 1929. p. 8.

Juvenile delinquency may be defined as violation of law by persons of juvenile-court age or conduct on the part of such persons so seriously anti-social as to interfere with the rights of others or menace the welfare of the delinquent himself or of the community.

Workers in juvenile courts have pointed out repeatedly the unsoundness of designating all maladjusted children as delinquents. The indiscriminate use of such terms often affects the attitudes of children and tends to increase the difficulty of adjustment.[1]

Tabulations of Adult Crime

One source of error in many discussions of crime is that no one takes the trouble to ascertain what the quoted statistics are supposed to represent. For example: The extent of crime may be determined for any given period by (1) the total number of law violations, (2) the number of offenses known to the police, (3) the number of persons arrested, (4) the number of persons brought to trial, (5) the number of persons convicted, (6) the number of persons committed to penal institutions annually, or (7) the population of penal institutions in any specific year.

It is generally agreed among penologists that, as one moves from (1) to (7), he accepts statistics that are increasingly less representative of the amount of actual crime in the community.

Total number of law violations—Ideally the best measure of crime is a statistical summary of all law violations. These data would include the persons who ride on street cars without paying their fares, those who drive their autos beyond the specified speed limits, and those who take the property of others either by violence or under the subtle schemes of "high" finance.

It is obviously impossible to obtain a record of all law violations. Even though it were possible, it would still be difficult to compare records between states unless the laws were all uniform. The difficulties would increase as one attempted to compare nations, or races, or civilizations.

Offenses known to the police—The second best representation of crime is the record of offenses known to the police. In 1931, according to one of the so-called Wickersham reports, not one state published statistics of crimes known to the police. Out of about 3,000 cities over 2,500 in population, only 285 publish general criminal statistics, and only 14 cities print reports of offenses known to the police.[2]

The Bureau of Investigation of the Department of Justice, in cooperation with the International Association of Chiefs of Police, is endeavoring to standardize reports as to offenses known to the police. So far about one-third (1,200) of the cities over 2,500 in population have cooperated at irregular intervals in supplying data in connection with seven major offenses.[3] Table 1 shows data from about 1,200 cities during 1931.

TABLE 1—PERCENT OF OFFENSES KNOWN TO THE POLICE IN 1,200 CITIES OVER 2,500 POPULATION, 1931

Classes of offenses	January	February	March	April	May
Murder and non-negligent manslaughter	.5	.4	.5	.4	.5
Manslaughter by negligence	.3	.4	.4	.5	.5
Rape	.4	.3	.4	.4	.4
Robbery	6.7	6.7	5.7	5.8	4.8
Aggravated assault	3.0	3.2	3.4	3.6	4.0
Burglary—breaking or entering	21.2	22.0	21.3	20.6	20.5
Larceny—theft:					
$50 and over	8.3	7.9	7.9	7.2	7.5
Under $50	34.8	35.2	36.2	36.0	36.5
Auto theft	24.8	23.9	24.2	25.5	25.3
Total	100.0	100.0	100.0	100.0	100.0

Taken from: United States Department of Justice, Bureau of Investigation. *Uniform Crime Reports.* Vol. II, No. 5; May, 1931. Washington, D. C.: Government Printing Office, 1931. p. 5.

It is clear, then, that although splendid progress has taken place in the field of police statistics, the incompleteness and lack of uniformity of the records make it inadvisable for one to draw sweeping conclusions as to crime conditions.[4]

Statistics of arrests—Third in value as representing crime conditions should be the police

[1] Van Waters, Miriam. *Youth in Conflict.* New York: Republic Publishing Co., 1925. "The Attitude of Delinquency," p. 146-56.

[2] Wickersham, George W., Chairman. *Report on Criminal Statistics.* No. 3. April 1, 1931. National Commission on Law Observance and Enforcement. Washington, D. C.: Government Printing Office, 1931. p. 32-34.

[3] These several hundred cities over 10,000 in population contain about fifty million persons. There are about 3,000 cities and towns over 2,500 in population. It should be noted, too, that only a little less than half of the population of the United States live in rural areas.

[4] Consult *Report on Criminal Statistics,* National Commission on Law Observance and Enforcement, p. 37-39; *The Annals* of the American Academy of Political and Social Science, November, 1929, p. 75; and standard works on criminology.

reports of arrests. Massachusetts is the only state that publishes complete statistics of arrests for the entire state.

As compiled at the present time, most police reports of arrests are inaccurate. One cannot tell whether the persons listed were arrested on suspicion, arrested and prosecuted, or merely summoned to appear in court.

Police statistics for arrest lack uniformity as to the reporting of such items as sex, age, residence, nationality, color, occupation, and marital condition.[1]

Court statistics—Next to the police statistics in theoretical representativeness of crime conditions are the data of the courts as to the number of persons brought to trial, convicted, or dismissed. State reports of criminal court statistics are published by twenty-three states. The Attorney-General reports annually on the federal courts.

Difficulty arises in comparisons of court statistics between states because of variations in the types of offenses included and methods of tabulating the data. A further defect is that many states do not report on the cases handled in police courts.[2]

Commitments to prison—Sometimes discussions of crime conditions are based upon the number and types of criminals admitted to prisons in a given year. Table 2 includes data from one hundred state and federal prisons.[3]

Ratios similar to those shown in Table 2 are often cited as evidence of crime conditions. Helpful as these data may be, they have certain definite weaknesses: (1) the number sent to prison in a given year does not include those who committed crimes and escaped detection; those arrested, but not convicted; those convicted, but placed on probation; (2) the specific offenses in Table 2 include persons in the different states who committed acts of varying seriousness; and (3) data on state and federal prisons nearly always omit the thousands of persons committed to municipal and county jails for short periods.[4]

Statistics on prison populations—A common estimate of the extent of crime is the summary of prison populations during a given year.

[1] See *Report on Criminal Statistics*, National Commission on Law Observanec and Enforcement. p. 36.
[2] See *Report on Criminial Statistics*, p. 58-71.
[3] U. S. Department of Commerce, Bureau of the Census. *Prisoners in State and Federal Prisons and Reformatories, 1927*. Washington, D. C.: Government Printing Office, 1931. This bulletin is published each year.
[4] For full discussion and bibliography on statistics of crime, see standard works on penology such as Edwin H. Sutherland's *Criminology*, published by J. B. Lippincott Company, 1924. Also, *Report on Criminal Statistics*, National Commission on Law Observance and Enforcement.

TABLE 2.—MALE PRISONERS RECEIVED IN STATE AND FEDERAL PRISONS

Offense	Prisoners received during 1927, 1926, 1923, and 1910[1]							
	Number				Ratio per 100,000 general population of same sex[2]			
	1927[3]	1926[3]	1923	1910	1927[4]	1926[4]	1923	1910
Total male prisoners	41,227	40,601	35,216	26,222	80.8	76.7	61.9	55.5
Homicide	2,173	2,391	3,220	2,535	4.3	4.5	5.7	5.4
Rape	1,568	1,567	1,497	1,077	3.1	3.0	2.6	2.3
Robbery	3,575	3,583	2,923	1,216	7.0	6.8	5.1	2.6
Assault	1,942	1,998	1,830	2,610	3.8	3.8	3.2	5.5
Burglary	7,150	7,101	6,295	6,004	14.0	13.4	11.1	12.7
Forgery	2,846	2,633	2,568	1,611	5.6	5.0	4.5	3.4
Larceny and related offenses	11,741	11,367	8,436	7,709	23.0	21.5	14.8	16.3
Embezzlement	429	478	494	293	0.8	0.9	0.9	0.6
Fraud	606	913	614	509	1.2	1.7	1.1	1.1
Having stolen property	1,407	1,324	638	231	2.8	2.5	1.1	0.5
Larceny	9,299	8,652	6,690	6,676	18.2	16.4	11.8	14.1
Sex offenses, except rape	1,087	1,122	1,110	796	2.1	2.1	2.0	1.7
Violating liquor laws	3,338	3,220	2,533	306	6.5	6.1	4.5	0.6
Violating drug laws	1,560	1,749	2,015	22	3.1	3.3	3.5	(5)
Carrying weapons	423	368	242	146	0.8	0.7	0.4	0.3
Non-support or neglect of family	494	401	232	115	1.0	0.8	0.4	0.2
Violating U. S. postal laws, not elsewhere specified	148	90	260	.....	0.3	0.2	0.5	.....
Violating U. S. revenue laws	84	64	35	105	0.2	0.1	0.1	0.2
Other	2,897	2,690	1,872	1,910	5.7	5.1	3.3	4.0
Not reported	201	257	148	60	0.4	0.5	0.3	0.1

[1]Taken from: *United States Department of Commerce*, Bureau of the Census. *Prisoners in State and Federal Prisons and Reformatories, 1927*. Washington, D. C.: Government Printing Office, 1931. p. 11.
[2]Based upon estimated population July 1, 1927, 1926, and 1923, and enumerated population April 15, 1910.
[3]These figures represent the institutions which furnished detailed information.
[4]Based upon estimated population proportional to prisoners of each sex reported in detail.
[5]Less than one-tenth of 1 per 100,000.

Table 3 and similar tables always fail to represent adequately the number and types of criminals. As Bernard Shaw facetiously remarks, "The thief who is in prison is not necessarily more dishonest than his fellows at large, but mostly one who, through ignorance or stupidity, steals in a way that is not customary. He snatches a loaf from the bakers' counter and is promptly run into gaol. Another man snatches bread from the table of hundreds. . . . and he is run into Parliament." [1]

While the methods of the Bureau of the Census are reasonably accurate, the records of the prisons are often incomplete, based upon the prisoner's word, and lacking in uniformity. Variations in the length of sentences and the proportion of sentences actually served add to the difficulties in using prison statistics. Furthermore, up to 1930, the federal reports did not include the prisoners in local jails and workhouses.[2]

Comparisons between states on the basis of prison populations are inadequate because (1) the police and judicial machinery in some states are more effective than in others; (2) in one state a particular type of criminal is sent to a state prison, while in another state he may be sent to a city jail; (3) some states have effective probation and parole systems which materially reduce the number committed to or kept in prison; and (4) on occasion, newspaper criticisms may result in a suspension of the parole system or greater severity by courts which in turn produce temporary variations in prison statistics.

Summary—The purpose of the above section will have been met if the reader realizes (1) that the "extent of crime" may be measured in a number of different ways; (2) that the present status of record keeping of criminal statistics does not warrant many of the current, sweeping generalizations as to crime conditions; and (3) that there are agencies at work bringing each year great uniformity and accuracy in statistics on crime.

Statistics as to Juvenile Delinquency[3]

For several years the Children's Bureau of the United States Department of Labor has been at work upon a plan for obtaining uniform juvenile court statistics on a national basis. The plan is wholly voluntary. In 1928 there

TABLE 3.—PRISONERS PRESENT IN STATE AND FEDERAL PRISONS IN 1927 AND 1928

State	Prisoners present on a given date [1]			
	Jan. 1, 1928	Jan. 1, 1927	Number per 100,000 of general population [2]	
			1928	1927
United States[3]	**106,517**	**98,245**	**91.4**	**85.2**
Federal prisons and reformatories	7,722	6,803	6.5	5.8
State prisons and reformatories	98,795	91,442	85.3	79.8
Alabama	(4)	(4)	(4)	(4)
Arizona	485	444	103.6	98.2
Arkansas	1,246	1,231	64.4	64.3
California	6,328	5,794	140.6	134.8
Colorado	1,258	1,129	116.2	105.9
Connecticut	940	920	56.9	56.8
Delaware[5]	.....	.....	.....	.....
Dist. of Columbia [5]	.....	.....	.....	.....
Florida	2,558	1,910	184.2	142.5
Georgia	3,184	2,945	99.9	93.3
Idaho	396	382	73.2	72.3
Illinois	6,379	6,038	86.8	83.3
Indiana	3,961	3,789	125.3	115.2
Iowa	2,157	2,044	88.9	84.3
Kansas	2,708	2,675	147.8	146.7
Kentucky	2,188	2,248	85.9	88.8
Louisiana	1,743	1,686	89.7	87.5
Maine	384	399	48.4	52.1
Maryland [5]	2,095	1,921	130.3	120.9
Massachusetts	1,866	1,923	43.7	45.6
Michigan	6,338	5,168	133.4	116.3
Minnesota	2,167	2,240	80.1	83.9
Mississippi	1,717	1,563	95.9	87.3
Missouri	3,624	3,442	103.0	98.2
Montana	471	437	85.8	62.0
Nebraska	993	1,000	70.8	71.9
Nevada	190	232	246.8	299.7
New Hampshire	126	133	27.7	29.3
New Jersey	2,519	2,383	66.5	64.1
New Mexico	381	358	96.7	91.8
New York	7,531	7,367	65.5	64.2
North Carolina	1,723	1,478	59.0	54.9
North Dakota	302	309	47.1	48.2
Ohio	7,531	6,209	111.2	93.3
Oklahoma	3,278	2,677	136.2	113.3
Oregon	629	572	70.2	64.7
Pennsylvania	4,505	4,170	46.0	43.1
Rhode Island [6]	364	388	51.2	55.5
South Carolina	437	504	23.6	27.5
South Dakota	420	469	59.9	67.7
Tennessee	2,182	2,023	87.5	81.7
Texas	3,864	3,201	70.9	58.8
Utah	208	210	39.5	40.5
Vermont [7]	334	343	.....	110.1
Virginia	2,135	1,979	83.3	78.2
Washington	1,484	1,552	94.2	100.1
West Virginia	1,561	1,799	91.2	106.9
Wisconsin	1,601	1,494	54.5	51.5
Wyoming	301	264	122.9	110.9

[1] Taken from: United States Department of Commerce, Bureau of the Census. *Prisoners in State and Federal Prisons and Reformatories, 1927.* Washington, D. C.: Government Printing Office, 1931. p. 4.

[2] Based on estimated population Jan. 1, 1928, and 1927.

[3] No state prison or reformatory in Delaware or the District of Columbia.

[4] No census report received for 1927.

[5] Includes data for the Maryland house of correction and the state penitentiary.

[6] Data for 1928 and 1927 include the state reformatory for women, established since 1923.

[7] Includes for Jan. 1, 1928, only the state prison and house of correction for men; no report in 1927 for the state prison and house of correction for women.

[1] Quoted by Sutherland in his *Criminology*, p. 25.
[2] See the *Report on Criminal Statistics*, National Commission on Law Observance and Enforcement. p. 75-90.
[3] For details as to the trends of juvenile delinquency see Part IV of this bulletin.

were sixty-two courts in sixteen states supplying data, and in 1929 the number had increased to ninety-three courts. Table 4 summarizes data reported in 1928 and 1929.[1]

The data reported for 1928 in Table 4 came from courts in areas that include 17 percent of the population of the United States. If we assume that the prevalence of juvenile delinquency is the same for the country as a whole as it is for the area reporting, then approximately 200,000 delinquents were dealt with in 1928. It is admitted by competent authorities that this figure is only a "rough approximation."

More complete data are available as to the number of children in institutions. In January, 1923, there were 25,233 juvenile delinquents ten to seventeen years of age in institutions for delinquents, prisons, reformatories, jails, and workhouses. Approximately 9 percent of this number were in ordinary prisons, and 91 percent were in special institutions for maladjusted children.

Statistics as to offenders of federal laws who were sentenced to jail between July 1, 1929, and June 30, 1930, are shown in Table 5.[2] These data include *only prisoners sent to city and county jails* either because of the short sentence (one year or less) imposed or because of inability to pay the fine. Prisoners sentenced for more than one year are eliminated from these statistics because they are reported in connection with federal penal and correctional institutions. Clear recognition should be made of the fact that Table 5 includes those actually sent to city and county jails. It does not include all of the children and adults brought before federal courts. It does not include those sent to state and federal institutions.[3]

Evidence has been cited up to this point to show that nation-wide statistics as to juvenile delinquency are incomplete, inaccurate, and lacking in uniformity.[4] Attempts to compare cities break down because of differences in terminology and juvenile court procedure. Statistical comparisons between states are even more difficult. Persons interested in this problem must await the fuller development of the program of uniform statistics now sponsored by the Children's Bureau.

Of What Significance to Educators Are the Present Statistics on Crime?

What conclusions can be reached as to national statistics on the extent and types of adult crime? What is known as to the status and types of violations among juveniles? Of what significance are the present statistics on crime?

[1] Taken from a special unpublished report by Katharine F. Lenroot of the Children's Bureau, October, 1929, p. 44.

[2] Based upon Table 18 in *Federal Prisoners in Jails, 1929-30*. U. S. Department of Justice, Bureau of Prisons, 1931, p. 30.

[3] The whole problem of the federal juvenile offender who is brought before regular federal courts, instead of being examined by specially staffed juvenile courts, has been discussed in *Report on the Child Offender in the Federal System of Justice*, No. 6, National Commission on Law Observance and Enforcement. Since the publication of this report, Congress has passed a law authorizing the transfer of federal cases involving persons under 21 years to juvenile courts or other state courts.

[4] For further evidence see *The Delinquent Child*, White House Conference on Child Health and Protection, p. 237.

TABLE 4.—COLOR AND NATIVITY OF DELINQUENT CHILDREN DEALT WITH BY JUVENILE COURTS REPORTING STATISTICS TO THE CHILDREN'S BUREAU

Color and nativity	1928 62 courts reporting				1929 93 courts reporting			
	Boys		Girls		Boys		Girls	
	Number	Percent dist.	Number	Percent dist.	Number	Percent dist.	Number	Percent dist.
Total cases	29,151	.....	5,613	.....	38,461	.....	7,851	.....
Color reported	29,111	100	5,610	100	37,438	100	7,745	100
White	24,620	85	4,450	79	31,613	84	6,219	80
Native	21,272	74	4,078	73	27,469	73	5,726	74
Foreign born	534	2	117	2	595	2	148	2
Nativity not reported	2,814	10	255	5	3,549	9	345	4
Colored	4,475	15	1,158	21	5,825	16	1,526	20
Other	16	(1)	2	(1)	.....	.....	.....	.....
Color not reported	40	.....	3	.....	1,023	.....	106	.....

Taken from: Lenroot, Katharine F. *Juvenile Delinquency*. Prepared for the use of the National Commission on Law Observance and Enforcement. Washington, D. C.: U. S. Department of Labor, Children's Bureau, October, 1929. p. 44
Also: *Juvenile Court Statistics*, 1929, Children's Bureau, p. 6.
[1] Less than 1 percent.

Among some of the tentative conclusions of interest to educators are the following:

1. Teachers can do much to protect American youth from many unsubstantiated charges of lawlessness. Everyone agrees that there is too much social maladjustment among young people. However, the existing statistics do not support the sweeping generalizations so prevalent in newspaper stories, magazine articles, and public speeches. The real need is not for criticism, but for understanding by adults who are willing to assist young people in meeting the problems of an increasingly complex society

2. Educators can help laymen to interpret statistics on crime. The tendency for various persons to charge the home, the school, and the church with failure often leads to irreparable damage to these social institutions. Many of the current charges against these three agencies can neither be proved nor disproved by existing statistics.

3. Classroom teachers and administrators can help to make the statistics of juvenile delinquency more exact: first, by keeping complete records of each child's attendance, physical condition, mental status, progress, and interests; and, second, by supplying these data to juvenile courts, probation officers, visiting teachers, attendance officers, and other authorities.

4. Educators should be able to obtain from local statistics on crime, particularly the police and juvenile court records, some suggestions as to preventive measures which might be taken in the schools. For example, the existing statistics might show that delinquency was occurring in exceptional numbers among children who had just completed the eighth grade. Perhaps, the junior high plan of organization could continue these youngsters under supervision until more stabilized habits had been formed.

Communities have found it worthwhile to chart the districts in the city where delinquency is most prevalent. Sometimes this practice suggests the need for recreational and social center programs in the schools.

5. Educators should note in existing data on crime many suggestions for adult education. It is reasonable to assume that evening schools and extension classes might be effective in thwarting undesirable community influences.

6. The types and extent of certain criminal acts may indicate to school people the possibilities of uniting forces with the local police, the health department, the welfare agencies, the recreational associations, and other interested groups.

TABLE 5.—PRISONERS UNDER SENTENCE RECEIVED DURING THE YEAR ENDING JUNE 30, 1930, BY AGE AND SEX

Age (Years)	Number			Percent distribution		
	Total	Male	Female	Total	Male	Female
Under 15	23	21	2	0.1	0.1	0.1
15	53	50	3	.2	.2	.2
16	156	145	11	.5	.5	.5
17	305	290	15	1.0	1.0	.8
18	553	515	38	1.8	1.8	2.1
19	783	749	34	2.6	2.7	1.9
20	816	781	35	2.7	2.8	1.9
21	979	932	47	3.3	3.3	2.6
22	1,064	1,015	49	3.5	3.6	2.7
23	1,054	1,000	54	3.5	3.5	3.0
24	1,083	1,017	66	3.6	3.6	3.7
25 to 29	4,926	4,586	340	16.4	16.2	18.8
30 to 34	4,021	3,742	279	13.4	13.3	15.5
35 to 39	3,763	3,511	252	12.5	12.4	14.0
40 to 44	2,876	2,695	181	9.6	9.5	10.0
45 to 49	2,058	1,956	102	6.9	6.9	5.7
50 to 54	1,405	1,347	58	4.7	4.8	3.2
55 to 59	812	782	30	2.7	2.8	1.7
60 to 64	508	496	12	1.7	1.8	.7
65 and over	408	394	14	1.4	1.4	.8
Not reported	2,388	2,206	182	8.0	7.8	10.1
Total	30,034	28,230	1,804	100.0	100.0	100.0

Taken from: U. S. Department of Justice, Bureau of Prisons. *Federal Prisoners in Jails, 1929-30.* Washington, D. C.: Government Printing Office, 1931. p. 30.

PART II

Crime Cost and School Expenditures

The two and one-half billion dollar expenditure for public education has led to highly organized propaganda for retrenchment. Why does not the enormous crime bill of our nation bring forth equally active and well-organized protests? Are American citizens unaware of the fact that estimates of crime costs range from one billion to thirteen billion dollars annually?[1]

The purpose of this section is not to contend that the expenditures are too great for the police systems, courts, and penal institutions of the United States. Perhaps if more money were spent on the preventive phases of police work, there might be some reductions in the cost of penal and correctional treatment. This section is chiefly concerned in showing the magnitude of public expenditures for crime control and to compare these costs with those of public education.

What appear to be the most reliable figures on crime costs are those in the *Report on the Cost of Crime,* compiled in 1931 by the National Commission on Law Observance and Enforcement.[2] A portion of the data of the national commission will be summarized in the following pages under the following topics: (1) the public cost of administration of criminal justice, (2) private expenditures for protection against crime, (3) private losses due to criminal acts, (4) indirect losses to the community due to the existence of crime, (5) a summary of the total cost of crime, and (6) the total cost of crime as compared with school costs.

The Public Cost of the Administration of Criminal Justice

The federal, state, and local governments all participate in the administration of criminal justice. Each type of government has its police officers, prosecution officials, criminal courts, probation and parole agencies, and penal institutions.

Federal costs—The largest item in the federal expenditure for criminal justice is for police activities. During the fiscal year 1930, there were sixteen agencies of the federal government with police duties. One of these was the Bureau of Inquiry of the Interstate Commerce Commission. The other fifteen agencies were distributed among seven executive departments such as the Department of Justice, the Department of Labor, and the Department of the Interior. The cost and extent of these widely scattered police functions are shown in Table 6.

TABLE 6.—COST OF FEDERAL POLICE ACTIVITIES, 1929-30

Agency	Criminal police cost
Department of Justice	$2,658,156.55
Treasury Department	
Bureau of Internal Revenue	609,225.59
Secret Service	577,102.49
Customs Service	2,529,113.25
Coast Guard	13,557,581.50
Bureau of Prohibition	10,406,900.19
Post Office Department	387,674.98
Department of the Interior	
General Land Office	49,875.00
Indian Service	204,956.75
Department of Commerce	3,000.00
Department of Agriculture	
Bureau of Biological Survey	147,982.89
Food and Drug Administration	50,000.00
Plant Control and Quarantine	2,000.00
Department of Labor	
Bureau of Naturalization	25,000.00
Bureau of Immigration	1,595,172.00
Interstate Commerce Commission	100,000.00
United States Marshals	3,020,174.69
Grand Total	$35,923,915.88

Figures from Tables 1-8, *Report on Cost of Crime,* National Commission on Law Observance and Enforcement, p. 95-106.

A close inspection of Table 6 gives a clue to the types of police work of each department. The police activities of the Department of Justice are primarily concerned with the motor theft laws, the investigation of offenses against the United States, and the collection of criminal identification records.[3] The Department of the Interior protects the public domain and suppresses the liquor traffic among the Indians. The Department of Commerce enforces regu-

[1] Various estimates are summarized in *The Problem of Crime* by C. J. Ettinger, published by Ray Long and R. R. Smith Inc., New York, 1932, Chapter II. There are also numerous estimates as to the cost of racketeering, such as those by Samuel Crowther in the *Ladies' Home Journal,* February, April, and May, 1931.

[2] National Commission on Law Observance and Enforcement. *Report on the Cost of Crime.* No. 12, June 24, 1931. Washington, D. C.: Government Printing Office, 1931. 657 p.

[3] Since 1930 the Prohibition Bureau has been transferred from the Treasury Department to the Department of Justice.

lations regarding the sponge fisheries and the transportation of black bass. It is clear that the federal police functions are diverse, highly specialized, and extensive.

Supervision of the prosecutions for federal offenses is exercised by the Department of Justice. These activities include violations of the anti-trust, taxation, prohibition, plant quarantine, meat inspection, narcotic, postal, and immigration laws. The immediate prosecution of violations is conducted by eighty-four United States attorneys and their assistants in the various judicial districts. The cost of the various types of federal prosecution is shown in Table 7.

TABLE 7.—COST OF FEDERAL PROSECUTION ACTIVITIES, 1929-30

Agency	Prosecution cost of criminal cases
Department of Justice	$198,891.14
United States Attorneys	1,758,305.72
General Counsel, Bureau of Internal Revenue	39,780.00
Total	$1,996,976.86

Figures from Tables 9-14, *Report on Cost of Crime*, National Commission on Law Observance and Enforcement, p. 107-114.

The trial and sentence of offenders against federal laws takes place in the eighty-four United States District Courts. Under the supervision of the district courts are 1,100 commissioners who conduct preliminary hearings, hold persons for trial, and perform other duties in connection with criminal matters. The cost of these various agencies is shown in Table 8.

TABLE 8.—COST OF CRIMINAL BUSINESS OF FEDERAL COURTS, 1929-30

Agency	Cost for criminal court procedure
District Courts	
Courts	$5,615,837.95
Commissioners	588,820.91
Circuit Court of Appeals	95,298.95
Supreme Court	31,057.40
Total	$6,331,015.21

Figures from Table 21, *Report on Cost of Crime*, National Commission on Law Observance and Enforcement, p. 129.

The federal government maintains six penal and correctional institutions. On June 30, 1930, these institutions confined 13,567 prisoners. All adult prisoners serving terms of less than a year and a few sentenced for more than a year are confined in local and state prisons. The federal government pays at an agreed rate for each prisoner so confined. Persons temporarily detained in jails for federal offenses must be paid for by the national government. The total annual cost of institutional care and supervision by the Bureau of Prisons amounts to more than eight million dollars as shown in Table 9.

TABLE 9.—COST OF FEDERAL PENAL TREATMENT, 1929-30

Agency	Cost
Permanent penal institutions for adults	$4,172,204.62
Federal prison camps	40,582.34
Federal prisoners in local and state institutions	3,786,510.00
National Training School for Boys	207,062.00
Supervisory activities of the Bureau of Prisons	274,171.78
Total	$8,480,530.74

Figures from Table 33, *Report on Cost of Crime*, National Commission on Law Observance and Enforcement, p. 133.

Table 10 shows the total cost of federal criminal justice. It will be noted that 68 percent of the expenditure is for police activities. Prosecution calls for about 4 percent, court costs take 12 percent, and correctional treatment 16 percent. The various agencies for probation, parole, and pardon require only one-tenth of 1 percent of the total costs.[1] The figure $52,786,202.94 should be kept in mind for later comparisons in this bulletin.

TABLE 10.—TOTAL COST OF FEDERAL CRIMINAL JUSTICE, 1929-30

Agency	Cost	Percent
Police	$35,923,915.88	68.1
Prosecution	1,996,976.86	3.7
Courts	6,331,015.21	12.0
Penal institutional treatment	8,480,530.74	16.1
Probation, parole, and pardon	53,764.25	.1
Total	$52,786,202.94	100.0

Figures from Table 40, *Report on Cost of Crime*, National Commission on Law Observance and Enforcement, p. 139.

[1] Federal expenditures for probation increased to $237,000 in 1931-32 and to $415,000 in 1932-33.

State costs—Data on state costs for criminal justice are not so complete nor so recent as the facts presented previously on federal activities. In many instances estimates have been resorted to where exact data were not available.

State police forces are of four types: (a) highway police, (b) semi-military forces for frontier duty, such as the Texas rangers, (c) state police proper, chiefly for rural areas, and (d) miscellaneous agencies, such as criminal identification bureaus. Data are available on type (c) for the 9 states which have adopted the state police system. These data are given in Table 11.

TABLE 11.—COST OF CRIMINAL WORK OF STATE POLICE, 1928

State	Cost of criminal work
Connecticut	$121,549
Maine	.....
Maryland	13,805
Massachusetts	374,816
Michigan	.....
New Jersey	387,636
New York	648,047
Pennsylvania	737,656
Rhode Island	46,340
Texas	69,415
West Virginia	262,125
Total	$2,661,389

Figures from Table 2, *Report on Cost of Crime*, National Commission on Law Observance and Enforcement, p. 200.

Data are available on about one hundred state institutions for adult prisoners. Figures published by the Bureau of the Census indicate that these prisons cost in 1928 about thirty-six and one-half million dollars. The operating cost was about $320 for each inmate. The total cost for the care of minors in state custody in 1928 amounted to fourteen and one-half million dollars. The annual expenditure for operating costs for juveniles in state institutions amounts to $440.79 per inmate.

State parole and pardon agencies in 1928 cost $709,344 or an average expenditure of $7.25 per adult prisoner.

Table 12 summarizes the total cost in 1928 of state penal and correctional treatment. It should be noted that these figures, unlike those of the federal costs, do not include the costs for state-supported courts and prosecution agencies. The total cost of $51,721,122 amounts to about 5 percent of the total amount expended for all general state governmental purposes in 1928. Adding the cost of state police forces (see Table 11) would raise the estimated total cost of state enforcement of criminal justice to $54,382,511 for 1928.

Municipal costs—The National Commission on Law Observance and Enforcement presents facts on the cost of criminal justice in approximately three hundred cities of the United States. These cities included 70.9 percent of the urban population in the United States according to the 1930 census. Within these cities is to be found 38.2 percent of the total population.

The per capita [1] operating costs of police activities in 1930 in three hundred representative cities ranged from $ .66 in Massillon, Ohio, to $7.45 in Washington, D. C. The total cost of criminal police activities for the cities studied was $194,119,511 for 1930.

[1] Based on the 1930 population of each city.

TABLE 12.—COST OF STATE PENAL AND CORRECTIVE TREATMENT, 1928

Region	Annual expenditures, 1928				Annual per capita expenditure (1930 Census)
	Institutions for adults	Institutions for minors	Parole agencies	Total	
New England	$3,077,313	$1,595,693	$215,268	$4,888,274	$.599
Middle Atlantic	6,490,309	2,558,545	104,576	9,153,430	.349
East North Central	7,988,441	2,948,243	232,480	11,169,164	.462
West North Central	5,175,155	2,072,806	53,966	7,301,927	.549
South Atlantic	3,684,599	1,563,028	34,553	5,282,180	.334
East South Central	3,538,675	923,082	5,644	4,467,401	.452
West South Central	3,049,418	766,632	21,971	3,838,021	.315
Mountain	1,284,489	897,647	1,866	2,184,002	.590
Pacific	2,167,140	1,230,563	39,020	3,436,723	.419
Total	$36,455,539	$14,556,239	$709,344	$51,721,122	$.423

Figures from Table 12, *Report on Cost of Crime*, National Commission on Law Observance and Enforcement, p. 240-41.

Prosecution costs in 1930 per capita ranged from $.01 in Portsmouth, Virginia, to $.67 in New Castle, Pennsylvania. The total cost for the three hundred cities studied was $8,484,059 for 1930.

A few states, such as California, have adopted the public defender system whereby public employed officers defend indigents accused of crime. In other states provision is made locally for the defense of persons who cannot afford lawyers. The cost for public defense in thirty-five cities representing twelve states was $126,621 in 1930.

The total cost for municipal and juvenile courts in the cities studied was $20,144,148 in 1930. The per capita costs ranged from $ .08 in Elgin, Illinois, to $1.66 in Chelsea, Massachusetts.

Municipal penal institutions, including the cities' contribution to county jails, totaled $20,523,410 in 1930. The per capita costs ranged from $ .05 in Elizabeth, New Jersey, to $1.16 in Chattanooga, Tennessee. A number of cities reported no cost for this item because they use state penal institutions exclusively.

Local probation per capita costs ranged from $ .01 to $ .71 in cities in 1930. A number of cities do not provide this social service and consequently reported no costs. The total cost for the three hundred cities investigated amounted to $4,415,883 for the year 1930.

The total cost for criminal justice in three hundred representative American cities over 25,000 in population totaled $243,551,915 in 1930. These data are summarized in Table 13. This total averages $5.47 per capita on the basis of the 1930 population. Cities over one million in population pay a per capita charge of $7.46 as compared with $3.08 in the cities between 25,000-50,000 in population.

Table 13 shows that the municipal costs for criminal justice amounted to $243,551,915 in 1930 for 44,537,817 persons or about 70 percent of the urban population. Multiplying the average per capita cost of $5.50 by the 24 million other residents of urban areas gives $132,000,000. This sum added to the $243,551,915 gives an estimated cost for all urban areas of $375,551,915 in 1930.[1]

TABLE 13.—COST OF CRIMINAL JUSTICE IN 300 CITIES, 1930

Item	Cost
Criminal police activities	$194,119,511
Criminal prosecution	8,484,059
Public defense of accused	126,621
Criminal courts	20,144,148
Penal institutions	20,523,410
Probation	4,415,883
Total	$243,551,915

From Table 13, *Report on the Cost of Crime*, National Commission on Law Observance and Enforcement, p. 323-33.

There are still 53,820,223 residents in rural areas for which no costs have been compiled. Lacking the necessary evidence we may assume that the per capita cost for criminal justice among the rural population would average $3 or about the same as the per capita costs in urban areas of 25,000-50,000 population. Multiplying this assumed per capita cost by the number of the rural residents gives an estimated cost of $161,000,000 for 1930.

Adding the estimated cost for the total urban population to the estimated cost in rural areas gives a grand total of $536,551,915 for 1930 local criminal-protection costs. This figure is an estimate and should be used with caution.

Private Expenditures for Protection Against Crime

Exact data as to private outlay for protection against crime are impossible to obtain according to the National Commission on Law Observance and Enforcement.[2] Private expenditures include the cost of private police and guards, the purchase of various protective devices, and in some instances the support of delinquent minors committed to privately supported institutions.

Protective agencies—The term *protective agencies* has been used to include private police forces, private guards, and watchmen.

Private police forces are used by the railroads and large industrial corporations. In the state of Pennsylvania alone the cost for industrial police has been estimated at $1,260,000 per year. On the basis of the expenditures of the Pennsylvania Railroad for railroad detec-

[1] These estimates and those immediately following are based upon data in the *Report on the Cost of Crime*, but they are not given in the report.

[2] See Part 7 "Private Expenditures for Protection against Crime." *Report on the Cost of Crime*, No. 12, p. 349-69. Some authorities contend that the private expenditures against property losses should not be included in crime costs, because under ideal social conditions individuals would have to protect their property against weather, animals, and outlanders.

tives, the total annual cost for all of the major railroads in the United States has been placed at $13,000,000 per year.

No figures have been collected as to the cost of private guards, but the expenditure for the salaries of watchmen has been estimated as $159,000,000 per annum. The outlay for watch clocks for these watchmen averages $900,000 per year.

Protective devices—Protective devices such as safes, chests, and vaults require an average expenditure of $4,200,000 per year. The average annual cost of bullet-resisting glass is $300,000. Gas protective devices cost $1,000,000 in 1931. Protective services, used chiefly by banks, require about $10,500,000 per year. At least $2,750,000 is invested in armored cars, and the companies furnishing the same charged $3,900,000 for their services in 1929.

Private detectives—There are extensive private detective systems in the United States. Many practical difficulties have prevented the collection of data as to the cost of these services.

Correctional treatment—Private expenditures for correctional treatment includes (a) the cost of correctional institutions, and (b) the cost of privately supported probation activities. The estimated expenditure for the institutions was $850,000 in 1930. The National Commission for Law Observance and Law Enforcement published no data as to the cost of private probation activities.

Summary—Table 14 summarizes the private expenditures for protection against crime. Apparently, these private expenditures amount to about $200,000,000 per annum. This estimate should be kept in mind to supplement the federal, state, and local expenditures cited in previous sections of this bulletin.

Private Losses Due to Criminal Acts

As in several previous sections it is almost impossible to obtain comprehensive and accurate data as to the private losses due to crime. Organized extortion or "racketeering" has been estimated as depriving Americans of millions of dollars every year.[1] It is necessary, therefore, to resort to estimates based upon such evidence as is available. In most instances the available facts are accurate, but they are incomplete and are probably understatements of actual conditions.

This section will present facts on (1) losses due to crimes against the person, (2) losses due to crimes against property, (3) commercial frauds and extortion, (4) cost of insurance against crime, and (5) incidental losses through the administration of criminal justice.

Losses due to crimes against the person—Among the most common offenses against the person are homicide, wounding, and sex offenses.[2]

TABLE 14.—PRIVATE EXPENDITURES FOR PROTECTION AGAINST CRIME

Item	Estimated annual cost
Protective agencies	
Railroad police	$13,000,000
Watchmen salaries	159,000,000
Watch clocks	900,000
Protective devices	
Safes, chests, and vaults	4,200,000
Gas devices	1,000,000
Bullet-proof glass	300,000
Protective service for banks	10,500,000
Invested in armored cars	2,750,000
Armored car services	3,900,000
Private detectives	.....
Correctional treatment	
Private institutions	850,000
Private probation	.....
Total	$196,400,000

Based upon estimates in Part 7, p. 349-69, *Report on the Cost of Crime.* As shown in the chapter these figures are underestimates because of omissions in the data.

Due to lack of uniformity in record keeping and incomplete data it is not possible to state with certainty the annual number of homicides in the United States. In 1930 the Department of Justice reported that there were 5,913 homicides reported for 34.2 percent of the population of the continental United States. On this basis, the National Commission on Law Observance and Enforcement has estimated that the total number of reportable homicides would be approximately 8,720.[3] Assuming that the earning power of the average victim is $1,384 per year,[4] and that the average victim is a

[1] See articles by Samuel Crowther in the *Ladies' Home Journal* for February, April, and May, 1931. Also, Chapter II of *The Problem of Crime* by Clayton J. Ettinger and other references at the end of this bulletin.

[2] See the *Report on the Cost of Crime,* National Commission on Law Observance and Enforcement, p. 374-79.

[3] Does not include the rural communities. The total number of homicides each year in the United States is about 12,000, according to *Homicide in the United States* by H. C. Brearley, University of North Carolina Press, 1932, p. 15.

[4] The average income of industrial workers in 1925 according to "The National Income and Its Distribution" in *Recent Economic Changes in the United States,* Vol. 2, p. 777. (President's 1929 Conference on Unemployment.)

young, active worker, then the resulting loss in earnings would be about $127,000,000 per year. Although an estimate, this figure gives some indication of the magnitude of the economic loss to the country.

Crimes of wounding and injury are so varied in type and results that no estimates for the United States have been made. The data on sex offenses are even more incomplete than facts on mayhem. The absence of estimates on these types of crimes increases the conservative nature of estimates of the losses due to crimes against the person.

Losses due to crimes against property—Data as to property losses are based largely upon facts supplied by various insurance agencies. Among the major types of property losses are arson, rioting, theft, and embezzlement.[1]

Arson is the intentional destruction of property by fire. According to the National Board of Fire Underwriters the average annual fire loss in the United States amounts to $408,642,197. Of this amount $2,176,713 is the average annual loss due to known incendiarism. Experts estimate that at least 20 percent or more than eighty-one million dollars of the total fire loss should be charged against incendiarism.

Malicious mischief includes rioting, bombing, and sabotage. The only figure available is the losses paid by insurance companies for rioting. A nine-year average of this loss amounts to $2,747,989 per year.

Theft includes all types of stealing from petty pilfering to such major offenses as larceny, burglary, and robbery. The average of bank losses for burglary over a ten-year period totals $205,226 per year. Robberies of banks over a ten-year period resulted in an average loss of $1,371,349 per year. The losses due to theft from jewelers over a nine-year period have averaged $2,068,334 per year. Thefts of freight have cost the railroads $3,855,374 per year over a period of ten years. Losses due to automobile thefts, as measured by insurance paid for cars not recovered, have averaged $15,831,425 over a six-year period. Miscellaneous insured losses due to theft and robbery have averaged $8,432,000 per year. Net losses of mail theft have averaged $680,344 per year for the period from 1921 through 1930.

Insured losses due to embezzlement have amounted to $17,201,422 on the average for the years 1925 to 1929.

A summary of losses due to crimes against property is shown in Table 15. As stated previously these data are based upon reports of insurance companies. Undoubtedly, the insured loss of $55,000,000 due to known direct crimes against property is generally accepted as a minimum figure.

TABLE 15.—SUMMARY OF INSURED LOSSES DUE TO DIRECT CRIMES AGAINST PROPERTY

Type of loss	Loss
Arson	$2,176,713
Rioting	2,747,989
Theft	
Bank burglaries	205,226
Bank robberies	1,371,349
Jewelry	2,068,334
Automobile	15,831,425
Freight losses	3,855,374
Miscellaneous	8,432,000
Mail	680,344
Embezzlement	17,201,422
Total	$54,570,176

Based upon data given on pages 379-97 of *Report on the Cost of Crime*, National Commission on Law Observance and Enforcement.

Losses of wealth other than direct crimes against property—Crimes against property are understood to include the direct attacks upon wealth such as theft, robbery, rioting, and arson. Another type of crime is the "indirect attack" upon the wealth of individuals or organizations in the form of fraud, extortion, and racketeering.[2]

Commercialized frauds include insurance frauds, securities frauds, credit frauds, fraudulent bankruptcies, confidence games, forgery, counterfeiting, and the use of the mails to defraud. Since many of these crimes are never detected the National Commission pointed out the difficulty of even estimating the losses. Losses due to frauds in the sales of securities have been estimated at $600,000,000 for the United States in 1930. Forgery is credited with causing losses of $40,000,000 annually.

The Post Office Department has estimated that losses due to the use of the mails to defraud have averaged $68,634,342 annually. Losses due to extortion and racketeering were not even estimated by the National Commission on Law Observance and Enforcement.[3] Summarizing,

[1] See *Report on the Cost of Crime*, National Commission on Law Observance and Enforcement, p. 379-98.
[2] *Ibid.*, p. 398-413.
[3] Gunther estimates that racketeering costs $45 per capita in Chicago. See "The High Cost of Hoodlums" by John Gunther, *Harper's Magazine* 159: 529-40; October, 1929.

the losses due to indirect attacks upon wealth amount to at least $700,000,000 annually.

Cost of insurance against crime—Because of the possibility of losses from crime many individuals purchase theft, fidelity, or riot insurance. The amount of the premiums of such insurance may be considered a cost of crime.[1] The amount paid in premiums for burglary, robbery, and theft insurance over an eight-year period has averaged $22,511,602 per year. Automobile theft insurance averaged $36,282,540 annually. Fidelity insurance against defalcations of employees costs on the average $39,489,519 annually. Premiums on riot insurance for a nine-year period have averaged $5,252,801 per year. The total cost of all premiums for insurance against crime averages approximately $100,000,000 annually. These figures are considered a minimum estimate of the cost of insurance against crime.

Losses incident to the administration of criminal justice—Many private citizens must accept losses to serve on juries and to appear as witnesses in courts.[2] These losses are direct and real to many persons. Because of the possible loss many citizens avoid jury duty and similarly influence the effectiveness of the administration of criminal justice. The National Commission offered no estimates as to the amount of these private losses.

Indirect Losses to the Community Due to the Existence of Crime

Previous sections have presented evidence on the more or less direct losses due to crime. There are many losses due to grief, fear, and worry which no one can begin to estimate. However, the loss to the community of unproductive labor can be estimated.

The indirect losses of the community due to the existence of an unproductive criminal element consists of four types: (1) loss in earning power of criminals, (2) loss in earning power of prisoners, (3) loss in productive labor of law enforcement officers, and (4) miscellaneous labor losses.[3]

Loss in earning power of criminals—As shown in Part II the exact extent of crime in the United States is unknown. It is impossible, therefore, to know the exact number of criminals. Lacking this basic figure the National Commission offered no estimate on the loss of earning power of all criminals.

Loss in earning power of prisoners—The number of prisoners in local, state, and federal institutions is known with reasonable accuracy. Based upon 1928 data the estimated average daily population of all prisons is in the neighborhood of 145,000 persons. Assuming an average income of $1,205 per year,[4] the gross loss amounts to about $174,725,000 per year. Since prison labor results in useful products the National Commission deducts 50 percent of the loss and proposes a *net loss* figure of $87,000,000 per year. This figure gives an idea of the magnitude of the indirect economic injury to the community.

Loss of productive labor of officers—If lawlessness existed in relatively insignificant amounts, it would be necessary to maintain only a small group to fight crime. The diversion of many persons from productive labor to crime detection and prevention results in an indirect loss to the community.

The National Commission estimates that 108,000 persons were engaged in criminal police work at public expense in 1930. It is estimated that 14,300 persons are required to staff all types of prisons; institutions for juvenile delinquents employ about 8,500 persons; about 3,000 persons are engaged in probation work; and 18,400 full-time workers are required in connection with the prosecution machinery. In other words, approximately 170,000 persons are employed full-time in law enforcement activities.[5]

Assuming an average annual earning power of $1,385 per person, the loss of productive labor of such persons is approximately $235,000,000 per year. It is admitted that this is an indication of loss, not an actual loss.

Miscellaneous labor losses—Criminal lawyers, professional bondsmen, jurors, witnesses, employees of companies providing crime insurance, and persons employed in manufacturing and selling protective devices might be em-

[1] See the *Report on the Cost of Crime*, National Commission on Law Observance and Enforcement, p. 413-16.
[2] *Ibid.*, p. 416-19.
[3] *Ibid.*, p. 420-37.
[4] The report of the Commission uses $1,205 at this point (instead of $1,385 used above in connection with homicides) because it takes in the element of unemployment which is more common among wage workers than among salaried employees in industry.
[5] This figure does not include private detectives, industrial police, watchmen, and employees in private correctional institutions.

ployed in more socially useful labor. Due to many apparent difficulties the National Commission offered no figures as to these indirect labor losses.

Summary Statement of the Cost of Crime

The National Commission on Law Observance and Enforcement states it is "wholly impossible to make an accurate estimate of the total economic cost of crime to the United States." In spite of this warning Table 11 presents a summary of the estimates and exact data previously given in Tables 1 through 15 and the text of this section of the bulletin.

According to Table 16 the total cost of crime, represented in dollars, approximates $2,000,000,000 per annum. As stated many times previously in this section this figure is probably a minimum estimate of losses due to crime conditions.

The items in Table 16 "crime against persons" and "indirect losses of productive labor" are both estimates of losses in productive labor. Since these do not represent actual outlays of money, it is assumed to be advisable in subsequent comparisons to subtract these sums from the total. Even though this subtraction is made, an estimate of $1,500,000,000 is still a conservative statement of the public outlay for the purposes of preventing and controlling crime in the United States.[1]

Comparisons of Crime Costs with School Costs

In 1928 the total cost for all types of public elementary, secondary, and collegiate schools in the United States was about two and one-half billion dollars. The total cost of elementary and secondary schools alone amounted to about two billion dollars in 1928.

For every $2 spent on elementary and secondary school pupils, we spend $1.50 to control the criminal. There are more than 25,000,000 pupils in these schools. How many criminals are there to call forth an expenditure of a billion and one-half dollars? Are there 500,000 or 1,000,000 criminals? No one can say with certainty, but it is clear that the per capita outlay of society on its criminals far exceeds the per capita expenditure for its children.

Table 17 compares the state expenditures for delinquents in industrial schools, prisoners in penal institutions, and students in public elementary and secondary schools.

It is interesting to note that it costs on the average about $400 a year to maintain a delinquent in a public institution, $300 for an adult prisoner, and somewhat less than $100 for each public school pupil. In a sense, then, if the $100 spent annually on each public school pupil does not produce "a good citizen," the

TABLE 16.—SUMMARY OF EXPENDITURES FOR THE ADMINISTRATION OF CRIMINAL JUSTICE AND ESTIMATES OF THE LOSSES DUE TO CRIME

Type of loss or expenditure	Approximate cost [1]
I. Expenditures for administration of criminal justice	
A. Federal	
Police activities	$35,924,000
Prosecution	1,997,000
Courts	6,331,000
Penal institutions	8,481,000
Probation, pardon, and parole	54,000
B. State [2]	
Police	2,661,000
Penal institutions (adults)	36,456,000
Correctional institutions (minors)	14,556,000
Parole agencies	709,000
C. Municipal	
Police	194,120,000
Prosecution	8,484,000
Public defense	127,000
Courts	20,144,000
Penal institutions	20,523,000
Probation	4,416,000
Correction of estimate of local costs	293,000,000 [3]
D. Private	
Protective agencies	172,900,000
Protective devices	23,000,000
Correctional treatment	850,000
II. Losses due to crime	
Crimes against persons	127,000,000 [4]
Crimes against property	55,000,000
Indirect property losses	700,000,000
Cost of insurance	100,000,000
Indirect losses of productive labor	322,000,000 [4]
Total	$2,148,733,000

[1]The National Commission on Law Observance and Enforcement does not present a total cost of crime in its *Report on the Cost of Crime*. However, this table is based upon data and estimates taken from the report.

[2]Not including higher courts and prosecution agencies supported wholly by states.

[3]As explained in the text the police and other local costs included about 70 percent of the urban population and did not include the rural population. An estimate for 100 percent of the population gives the additional sum of $293,000,000 as explained in detail in the text.

[4]These two figures are estimates in terms of dollars of individual and community waste due to the loss of productive labor. All other figures represent either public or private expenditures to prevent, to correct, or to replace the waste due to crime.

[1] For the conclusions of the National Commission as to the significance of the facts on the cost of crime see the *Report on the Cost of Crime*, p. 438-53.

state must pay later three to four times that amount for penal or correctional treatment.

The National Commission on Law Observance came to three conclusions: (1) that the preponderant share of the total funds expended for criminal justice went for police activities; (2) that the amounts spent for penal institutions were large as compared with expenditures for probation; and (3) that the amounts expended for prosecution were relatively small

TABLE 17.—PER CAPITA EXPENDITURES FOR DELINQUENTS IN INDUSTRIAL SCHOOLS, PRISONERS IN PENAL INSTITUTIONS, AND STUDENTS IN PUBLIC SCHOOLS

States	Juvenile delinquents in industrial schools[1]		Adult prisoners in state penal institutions[2]		Students in public elementary and secondary schools[3]	
	Average enrolment 1926-1927	Per capita expenditure for current expenses 1926-1927	Average daily population 1928	Average per capita cost for operating expenses 1928	Average daily attendance 1927-1928	Per pupil cost for current expenses 1927-1928
1	2	3	4	5	6	7
United States	38,113	$425	100,410	$319.75	20,608,353	$87.22
Alabama	409	245	1,022	262.85	465,355	34.53
Arizona	105	573	535	272.45	68,572	115.53
Arkansas	175	545	1,184	206.79	348,981	34.35
California	1,339	501	6,547	188.86	847,836	130.97
Colorado	389	481	1,229	373.06	187,109	122.31
Connecticut	439	456	1,030	529.84	262,392	104.22
Delaware	245	400	.....	.....	35,003	84.74
District of Columbia	577	366	.....	.....	63,908	128.02
Florida	411	282	1,667	274.82	275,442	85.14
Georgia	112	313	400	181.48	535,196	30.38
Idaho	296	345	403	282.66	95,740	97.57
Illinois	2,967	518	6,684	302.15	1,175,978	99.62
Indiana	828	625	3,868	219.70	604,392	96.67
Iowa	710	425	2,220	379.17	461,861	101.25
Kansas	1,279	406	2,820	350.09	357,029	107.23
Kentucky	1,071	345	2,571	219.17	427,786	43.81
Louisiana	195	451	1,855	243.54	324,400	54.02
Maine	421	324	374	775.93	134,928	74.49
Maryland	985	340	2,180	288.62	225,669	80.13
Massachusetts	1,320	493	1,961	455.97	655,827	107.73
Michigan	1,603	567	6,642	382.45	770,362	117.76
Minnesota	706	553	2,150	447.51	453,303	99.00
Mississippi	300	318	1,598	312.89	427,789	37.02
Missouri	845	438	3,795	310.30	583,308	68.11
Montana	216	477	476	329.65	101,268	113.58
Nebraska	313	357	1,023	418.19	267,311	91.39
Nevada	.....	.....	231	361.39	14,875	133.34
New Hampshire	.....	.....	123	677.95	63,781	96.32
New Jersey	2,079	539	2,615	463.74	632,021	129.03
New Mexico	44	455	410	368.52	59,962	82.09
New York	5,570	488	7,752	401.04	1,768,364	137.95
North Carolina	415	321	1,922	287.88	640,651	46.63
North Dakota	185	480	305	591.60	137,405	102.98
Ohio	3,954	220	8,062	225.78	1,085,262	103.89
Oklahoma	671	550	3,410	239.84	467,983	60.12
Oregon	223	606	689	268.72	164,088	100.08
Pennsylvania	1,875	490	4,835	494.23	1,599,351	89.19
Rhode Island	177	644	386	554.26	97,719	97.59
South Carolina	190	147	551	275.97	348,394	40.65
South Dakota	.....	.....	418	403.37	135,754	101.09
Tennessee	785	237	2,000	401.47	476,692	39.37
Texas	1,051	290	4,138	329.65	1,026,074	52.14
Utah	.....	.....	229	482.11	119,017	76.92
Vermont	.....	.....	366	486.80	56,094	81.31
Virginia	543	223	2,298	77.15	437,861	44.35
Washington	868	356	1,605	276.07	273,542	102.64
West Virginia	547	259	1,900	103.31	332,169	67.90
Wisconsin	599	425	1,629	382.42	485,625	84.36
Wyoming	81	630	302	357.53	38,914	144.56

[1] Figures from Department of the Interior, Office of Education, Bulletin, 1928, No. 10, *Industrial Schools for Delinquents, 1926-1927*, Table 8, columns 7 and 9, page 11.
[2] Figures from National Commission on Law Observance and Enforcement, *Report on The Cost of Crime*, June 24, 1931, Table 3, column 2, page 220 and 221, also Table 4, column 5, page 222 and 223.
[3] Figures from Department of the Interior, Office of Education, Bulletin, 1930, No. 16, *Biennial Survey of Education, 1926-1928*, Table 7, column 8, page 460, also Table 28, column 8, page 487.

as compared with other law enforcement activities. These conclusions suggested possible redistributions or increases of expenditures, rather than a reduction of the public outlay.

Recently State Superintendent Lee of Missouri raised the question whether the cost of caring for criminals was decreasing the funds available for public education.[1] Is the cycle "more laws, more prisons, more laws, etc." reaching the point in some of the states where it is becoming a menace to the sources of money for public education?

The demand for more and larger penal institutions could be met in part by the increased use of probation and parole. The National Commission on Law Observance and Enforcement reported that supervision costs on the average $40 per year for probationers and $20 per year for paroled prisoners. Assuming that these costs were doubled it would still be cheaper for the states as compared with maintenance in prison at $300 per year.

Of What Significance to Educators Are the Costs of Crime?

Data presented in this section have shown the enormous magnitude of public expenditures for crime. The amounts for specific crime prevention or control activities and for losses due to lawlessness bring the total annual crime bill to well over two billion dollars. Discounting this amount by one-fourth because of controversial items, would leave an amount only one billion less than the total cost of all types of public education in the United States. Educators may well consider such specific problems as the following:

1. Persons who urge reckless retrenchment in public expenditures for education should be informed as to the expenditures and losses due to crime. Such discussion of facts does not necessarily mean that the billions paid in crime prevention should be drastically reduced, but the question may be raised: Can a nation that spends one and a half billion dollars annually for crime *afford to pay less than two and one-half billion dollars for education?*

2. Citizens should be acquainted with the fact that it costs the state $300 annually to maintain an adult in a state penitentiary as against $100 a year to give a child an education at public expense. A delinquent child in an institution costs the state four times as much annually as a pupil in the public school.

3. Are the mounting costs of penal institutions menacing the school revenues for public education? Here is a problem for study by educational associations and parent-teacher organizations.

4. Teachers can help to form an intelligent public opinion on such matters as probation, parole, juvenile courts, visiting teachers, and other devices for *keeping delinquents out of prison.* Not only does the early adjustment of a problem case increase the probability of salvaging the individual, but it may save the state hundreds of dollars annually in correctional and penal treatment.

[1] Lee, Charles A. "Maintenance of Penitentiaries as a Burden on Education." *United States Daily,* Washington, D. C., January 29, 1932, p. 10.

THE PEOPLE do not yet seem to see that the intelligence and the morality which education can impart is that beneficent kind of insurance, which, by preventing losses, obviates the necessity of indemnifying for them; thus saving both premium and risk. What is ingulfed in the vortex of crime in each generation would build a palace of more than Oriental splendor in every school-district in the land, would endow it with a library beyond the ability of a life-time to read, would supply it with apparatus and laboratories for the illustration of every study and the exemplification of every art, and munificently requite the services of a teacher worthy to preside in such a sanctuary of intelligence and virtue.—*Horace Mann. Life and Works of Horace Mann, Vol. IV. Boston: Lee and Shepard, Publishers, 1891. p. 189.*

PART III

Factors Associated with Crime

If those responsible for education are to materially reduce the extent of crime, they must direct the efforts of the schools against the predisposing factors of law-breaking. This section will review such objective evidence and expert opinion as exist on the general conditions associated with crime. Investigations as to the factors involved in juvenile delinquency will be discussed in Part IV.

Many of the early investigators of crime sought the single cause of antisocial behavior. Some have said that criminals are "born that way" and that society needed only to eliminate the defective families. Other investigators have centered attention upon poverty, feeble-mindedness, disease, and other so-called unit causes. In comparatively recent years penologists, police, social workers, and others have inclined toward the viewpoint that criminal tendencies result from many factors. Some of these contributing conditions are within the control of the individual delinquent, and other factors are responsibilities of organized society.

The data presented in this section have been collected from widely diverse sources. The evidence varies somewhat with the care of investigations, the representativeness of the facts, and the judiciousness of the conclusions. This *Research Bulletin* does not attempt to present a biased case either for or against any so-called "cause" or crime. In many instances, the reader is left to decide whether the evidence justifies any conclusion other than the need for more extensive study.

Illiteracy[1]

Statistics show that there are more illiterates in prison than in the general population, but this may indicate only that the literate are more successful in avoiding imprisonment.

Murchison found that there was a larger proportion of low-grade illiterates among a group of 4,000 criminals than among 50,000 members of the United States Army.[2] This fact, also, may be partly explained by the fact that the illiterate are less successful in avoiding prison.

A study of about 18,000 prisoners who were committed to prison in 1923 showed that about 11 percent were illiterate. The census estimate of illiteracy for the general population in 1923 was 7 percent.[3]

Brearley points out that the available data "tend to cast doubt upon the popular assumption that illiteracy and homicide are causally connected. The apparent association of the two factors may arise from similar background causes rather than from any direct influence of illiteracy upon the rate of homicide."[4]

Wealth

The rapid increase of material wealth in the United States has been cited as a "cause" of fraud, robbery, murder, and lesser crimes.[5] One writer has stated that "our enormous increase in wealth is in itself one of the underlying causes of the murder tendency. Temptation to murder, as well as to less violent crimes, increases on every hand."[6]

Brearley contends that if this viewpoint is sound, then we should expect to find the highest homicide rates in the centers of wealth and industry. Apparently, however, the relationship between the homicide rate and per capita wealth of the various states is negligible.[6] No data are available to prove with finality that the existence of great wealth increases the number of crimes against property.

Poverty

Clarence Darrow has said that "most people are sent to jail because they are poor."[7] He contends that a man who lacks food, clothing,

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[1] See *The Elements of Crime* by Boris Brasol, Oxford University Press, 1927, p. 162-64; and *Curing the Criminal* by Jesse O. Stutsman, Macmillan Co., 1926. p. 168.

[2] Murchison, Carl. *Criminal Intelligence.* Worcester, Mass.: Clark University, 1926. p. 97-111.

[3] U. S. Department of Commerce, Bureau of the Census. *The Prisoner's Antecedents*, p. 19.

[4] Brearley, H. C. *Homicide in the United States.* Chapel Hill: University of North Carolina Press, 1932. p. 148.

[5] Bagley cites material prosperity as a handicap to character education in *Education, Crime, and Social Progress.* New York: Macmillan Co., 1931. p. 30-31.

[6] Cited by Brearley, H. C., *Op. cit.*, p. 29-30.

[7] Darrow, Clarence. "Crime and Criminals," printed in *Readings in Sociology*, edited by Jerome Davis and Henry Elmer Barnes. Boston: D. C. Heath and Co., 1927. p. 918-26.

shelter for himself and dependents will take the things he needs or the money to satisfy his wants. Lacking skilled attorneys the poverty-stricken are more likely to be convicted and given the maximum penalty than are those who can afford able legal advice.

The determination of the relationship between poverty and crime is exceedingly difficult. In the first place, it is not easy to draw the line between the poverty-stricken and those who are not poverty-stricken. Second, poverty is so closely associated with lack of education, mental and physical defects, alcoholism, unemployment, and other factors that the causative elements have not been clearly determined.

The National Commission on Law Observance and Enforcement reports that the evidence on the rôle of economic conditions in the production of crime is at present superficial and contradictory.[1]

World War Effects

It has been contended that teaching men to be aggressive and violent during the Great War has seriously changed attitudes and behavior during times of peace. Brearley writes that the statistics indicate very little increase in homicide since the World War, although the War may explain in part the increase of crimes against property.[2]

Frontier Spirit

Adams, Dodd, and other historians have emphasized "the tradition of lawlessness" which is associated with the development of a young country.[3] Brearley writes that the appeal to history has probably been overemphasized, and certainly the theory is not supported by the homicide rates in such young countries as Australia, Canada, and South Africa.[4]

Prohibition

The belief is held by some that prohibition has had a diminishing influence upon minor crimes, but has apparently not diminished such major crimes as homicide.[5]

In the year ending June 30, 1930, the number of prisoners[6] sent for short periods to city and county jails for violating federal laws was as follows:

	Men	Women
Motor vehicle theft act	455	14
Drug laws	705	168
Liquor laws	20,118	1,309
All other laws	6,952	313
	28,230	1,804

The figures above indicate that there were over 21,000 persons who were "criminals" because they violated the federal prohibition laws. Whether, in the absence of federal laws, these same persons would have violated local and state liquor laws is a question which may be debated without hope of solution.

Brearley found the evidence on the effects of prohibition so controversial that he could not conclude whether or not prohibition had increased the amount of homicide.[7]

Alcohol and Drugs

According to Warden Lawes of Sing Sing, fewer than 10 percent of the felons are "strictly alcoholic," and fewer than 7 percent have at any time been addicted to drugs. On the basis of particular types of crime, alcoholics exceeded the average expectancy in 1927 of persons imprisoned for burglary, assault, and homicide. Drug addicts exceeded the average expectancy for persons arrested for burglary.[8]

From Table 2 of this bulletin it may be noted that the number of prisoners in federal and state prisons for violating drug laws increased from less than .1 per 100,000 general population in 1910 to 3.1 per 100,000 in 1927. Prisoners who violated the liquor laws increased from .6 per 100,000 in 1910 to 6.5 per 100,000 in 1927. These apparent increases are due to the passage of federal drug and prohibition laws since 1910. The conclusion is not warranted that there were

[1] National Commission on Law Observance and Enforcement. *Report on the Causes of Crime, Vol. I*, No. 13, June 26, 1931. Washington, D. C.: Government Printing Office, 1931. p. 117.
[2] Brearley, H. C. *Homicide in the United States*, p. 32.
[3] See "Our Lawless Heritage" by James T. Adams, *Atlantic Monthly* 142: 732-40; December, 1928, and "Our Ingrowing Habit of Lawlessness" by William E. Dodd, *Century* 66: 691-98; October, 1928.
[4] Brearley, H. C. *Op. cit.* p. 50.
[5] Bagley, W. C. *Determinism in Education*. Baltimore: Warwick and York, 1925. p. 94-95.
[6] These figures do not include prisoners sentenced to federal and state institutions for more than a year.
[7] Brearley, H. C. *Homicide in the United States*, p. 47.
[8] Lawes, Lewis E. *Life and Death in Sing Sing*. Garden City, N. Y.: Doubleday, Doran and Co., 1928. p. 41-32.

relatively more drug addicts or alcoholics in 1927 than in 1910.

Brearley reports that alcohol is closely associated with homicide and other acts of violence because of its psychological effects.[1]

Immigration

It has often been asserted that crime conditions in the United States are due almost entirely to immigration. This "belief" is so widespread that the National Commission on Law Observance and Enforcement devoted one of its volumes to this single topic.[2]

Following an investigation of convictions for offenses in a number of the large cities of the country, the National Commission concluded:

> The foreign born in general are found to commit less crime, in proportion to their numbers, of like age and sex, than the native born, and that the foreign born approach the crime standard set by the native born most nearly in crimes of personal violence and drop farthest below it in crimes for gain.[3]

After a study of limited data on the violations of the liquor prohibition laws, the National Commission tentatively concluded:

> These figures represent too limited an experience in time and in number of cases to serve as a basis for definite conclusions. They may, however, be accepted as indication that further study would probably find the native-white and the foreign-born groups accused and convicted of violations of the federal prohibition laws in proportions very closely approximating their relative shares of the male population twenty-one years and over.[4]

After a study of prisoners committed to five correctional institutions for petty offenses, the national report concludes:

> The combined experience of these institutions brings added support to the conclusion previously advanced. Their commitments for the 5-year period studied would total several hundred thousand, a fairly formidable array of evidence. It indicates that the foreign born fifteen years and over are committed to institutions for the care and treatment of delinquents somewhat less frequently in proportion to their numbers than are the native born.[5]

From data obtained about prisoners in state prisons, the national report concludes:

> These data on commitments to federal and state prisons offer strong support to the conclusion tentatively advanced in previous sections. They leave little room for doubt of the fact that foreign-born persons commit fewer major offenses, in proportion to their numbers, of the same sex and age, than do the native born. They indicate that the offenses committed by the foreign born are frequently crimes of violence, of the type ordinarily arising from personal grievance, rather than those committed in cold blood by men desiring to gain more money in shorter time than can be achieved through honest effort. They contain further evidence to the effect that of the foreign-born group those coming from certain countries commit crimes with greater frequency, in proportion to their numbers, than do those from other places.[6]

The American-born children of the foreigner are often charged with contributing an unusually large proportion of the juvenile delinquency. Little objective evidence exists, but police officers, judges, and other authorities agree that the immigrant's child is the "big crime problem at the present time." Police and other competent persons believe that the criminal tendencies are not due to the foreign stock, but are

> . . . traceable to the effect of the conditions under which he and his parents must live, and the influences to which he is subjected in the neighborhood where he spends his most impressionable days.[7]

The National Commission concludes its study by insisting that "charging our high crime rates against the foreign born is merely evading the real difficulties of life instead of trying to solve them."[8] Instead, society needs to examine the various economic and social problems, and to help individuals to make the necessary adjustments.

Unemployment

A study, made before the present economic depression, of 1,916 prisoners in a Pennsylvania prison, reported that unemployment was associated with poverty, bad associates, idleness, gambling, and other factors. The investigators were unable to determine which part of the "constellation of causes" actually leads to the criminal act.[9]

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[1] Brearley, H. C. *Homicide in the United States*. p. 60.
[2] National Commission on Law Observance and Enforcement. *Report on Crime and the Foreign Born*. No. 10, June 24, 1931. Washington, D. C.: Goverment Printing Office, 1931. 416 p.
[3] *Ibid.*, p. 134.
[4] *Ibid.*, p. 138.
[5] *Ibid.*, p. 146.
[6] *Ibid.*, p. 156.
[7] *Ibid.*, p. 163.
[8] *Ibid.*, p. 416.
[9] Root, William T., Jr., and others. *A Psychological and Educational Survey of 1,916 Prisoners in the Western Penitentiary of Pennsylvania*, p. 199-203.

In a study of about 16,000 commitments to prison in the first half of 1923, it was reported that 69 percent were employed at the time of the crime. Of the 31 percent unemployed, 14 percent had been unemployed a month or less, and 24 percent for less than six months.[1]

The National Commission on Law Observance and Enforcement reported statistics on the relationships between employment and crime fluctuations in Massachusetts. The conclusion to the Massachusetts data was as follows:

> Unemployment is revealed as an important causative factor in vagrancy and in crimes against property. Its influence upon other offenses, however, is comparatively slight and but occasionally seen. Other causes than the ebb and flow of the business tide must therefore be sought for the explanation of these crimes. But the relative importance of offenses against property in the total of criminality is such as to establish industrial stabilization as a significant element in any program of crime prevention. The conclusion seems inescapable that the assurance of economic security might be expected to bring with it an appreciable reduction in the volume of crime.[2]

Among its final conclusions, the National Commission wrote:

> These inquiries began with the question: If a nation or a community wishes to approach more and more closely toward law observance and enforcement, what conditions will it seek to establish for the occupational life of the individual and the economic life of the community?
>
> The first answer suggested by the data at hand is: *Security of employment.* This means removing the fluctuations which cause recurrent unemployment, and meanwhile, since that task is a momentous one, establishing provisions to prevent the burden of present conditions from falling with crushing weight upon those members of society whose other defenses are already weakened.[3]

Types of Occupations

According to Warden Lawes of Sing Sing Prison, that institution has had inmates from every station and walk of life.[4] Although there have been prisoners from the "better" classes, almost 99 percent of all prisoners have "come from poor homes and the common occupations."[5]

The data presented by Lawes indicate that occupational factors influence the type of crime. For example, occupational demands upon merchants, salesmen, bankers, and brokers apparently explain why there is relatively more larceny among these groups than among the farmers. Other groups show that the factors or persons associated with the occupation determine the type of crime most likely to be committed.

Newspapers

Whether or not newspapers exert a constructive or destructive effect in connection with crime is a question not seriously embarrassed by objective evidence.

Studies cited by Brearley show that crime news is printed in greater detail and larger amounts than before 1900. It is believed by some that these reports suggest crimes to others, although enforcement officers do not agree unanimously. Brearley writes that evidence is so "scanty and inconclusive" that no one can say whether the destructive effect of the newspapers is great or small.[6]

Holmes examined twelve New York City newspapers and concluded (1) that the papers give a large proportion of the daily space to crime news, and (2) that the amount of space has tended to increase during the past few decades.[7] He sent questionnaires to police officers, judges, district attorneys, and similar types, asking them to state their opinion as to the effect of the press. According to the summary of the replies, the public officials believe that the newspapers encourage crime. Holmes wrote:

> An analysis of the replies quoted in the previous chapter shows that in the opinion of those officials the newspapers are guilty of inciting to crime; of aiding criminals in the commission of crime by furnishing them more or less exact information as to how to commit crimes; of showing criminals how profitable crime is; of aiding them in their escape from apprehension; of thwarting justice by "newspaper trials" and otherwise making a travesty of the administration of the law, of the actual court proceedings themselves; of preventing the secur-

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[1] See *The Prisoner's Antecedents*, p. 35-37.

[2] National Commission on Law Observance and Enforcement. *Report on the Causes of Crime, Vol. I*, No. 13, June 26, 1931. Washington, D. C.: Government Printing Office, 1931. p. 312.

[3] *Ibid.*, p. 330.

[4] Lawes, Lewis E. *Life and Death in Sing Sing.* Garden City, N. Y.: Doubleday, Doran and Co., 1928. p. 43-44.

[5] It has been argued (1) that the better classes can afford the legal assistance necessary to win nolle prosse, probation, or parole, and (2) that the prison population does not represent all types of offenders. See Part II of this bulletin.

[6] Brearley, H. C. *Homicide in the United States*, p. 40.

[7] Holmes, Joseph L. "Crime and the Press." *Journal of Criminal Law and Criminology*, May and August, 1929. Quoted in *Battling the Crime Wave*, by Harry Elmer Barnes, p. 222-29.

ing of impartial juries; of making of the offender a popular hero, one to be emulated; and by omission at least of thwarting whatever deterrent effect there may be in present penal methods. . . .

The epidemic of similar cases which followed the newspaper exploitation of Hickman is too recent to require further illustration. That its influence was a cause of similar crimes in various parts of the country is indicated by the news items just quoted. The danger of such publicity was taken cognizance of by school authorities in various parts of the country. For example, the superintendent of schools in New York City issued instructions to the teachers which were intended to guard against repetitions of Hickman's crime.[1]

Brasol does not believe it is possible to trace a specific crime back to a particular news item, but the constant repetition of crime news does demoralize social psychology.[2] He wrote:

From the standpoint of criminology, however, the principal danger of perverted publicity is its *ultimate* demoralizing effect upon social psychology. Examined from this angle, indiscriminate journalism unquestionably occupies a prominent place among the factors which either cause or encourage the growth of the criminal propensity leading to the crystallization of the *"milieu criminel."*

Recidivism

A recidivist is a person who has been in prison more than once. These persons may be sent back to prisons either because (1) they violate the parole conditions under which they were released; (2) they fall into the environmental difficulties similar to those which led to previous convictions; or (3) the first prison sentence gave them new contacts or confirmed old habits in crime. Crowded conditions and alleged brutality in prisons have recently focused attention upon (3) as a problem calling for public attention.

Point (2) is illustrated by studies of delinquency areas in Chicago. In a group of more than 8,000 delinquents, studied over a period of seven years, 34 percent of those from high-rate areas became recidivists, while 24 percent from the areas with low delinquency rates became repeaters.[3]

A study of about 100,000 prisoners committed to state prisons, federal prisons, jails, and workhouses during the first half of 1923 showed that approximately 50 percent had been committed previously. Thirty-one percent of those in the state and federal prisons had had one previous commitment.[4]

A report of prisoners received during 1927 in state and federal penal institutions showed that 42 percent out of 44,000 were recidivists. Among the male prisoners the percent of recidivists is highest for violations of the drug laws and for burglary. The percent of recidivism is lowest for those convicted of non-support, homicide, and sex offenses.[5] The proportion of male recidivists to women repeaters was 26 to 1.

The problem of recidivism brings up the question of why society has prisons. At one time the theory was that the criminal should be segregated from his fellows so that he could meditate upon his evil ways and become penitent (hence the name, penitentiary). Another theory has been that of punishing the criminal for his deed. The name reformatory arises from the plan of "reformation." Crowded conditions and other factors have operated in such a way that the populations of "prisons, penitentiaries, and reformatories" do not greatly differ. The newer theory is that the prison should "re-educate" the prisoner in his knowledge, attitude, and skills. Since previous theories of punishment and reform have failed with so many, it should be interesting to see what education can do.

Schools and Education[6]

A study of the antecedents of about 18,000 prisoners committed to prisons during the first six months of 1923 showed a smaller proportion had gone beyond the elementary school than in the general population.[7] Table 18 shows the relative proportions reported in the 1923 study.

In commenting upon the data of Table 18, the federal study of 1923 concludes:

These figures afford no support to the sensational statements frequently made in recent years, to the effect that education, and especially college education, tends to promote crime. Insofar as education, or the lack of it, is a factor in the situation, the census statistics indicate that an increase in the

[1] Holmes, cited in Barnes, Harry Elmer. *Battling the Crime Wave.* Boston: Stratford Co., 1931. p. 228-29.
[2] Brasol, Boris. *The Elements of Crime.* New York: Oxford University Press, 1927. "The Press," p. 165-85.
[3] National Commission on Law Observance and Enforcement. *Report on the Causes of Crime, Vol. II.* No. 13, June 26, 1931. Washington, D. C.: Government Printing Office, 1931. p. 49.
[4] See Table 27, p. 41, *The Prisoner's Antecedents.*
[5] Brearley concludes that the typical slayer is usually a first offender. See *Homicide in the United States,* p. 86.
[6] Sutherland, Edwin H. *Criminology.* Philadelphia: J. B. Lippincott Co., 1924. "Education," p. 171-74.
[7] U. S. Department of Commerce, Bureau of the Census. *The Prisoner's Antecedents.* p. 19.

educational facilities, and in their use, should tend to reduce the amount of crime.

In judging the significance of the figures it must be emphasized that these figures refer only to convicted prisoners and not to all lawbreakers. It is quite probable that offenders having education (partly by reason of their education) are more successful than the uneducated lawbreakers in avoiding arrest and conviction for their crimes.[1]

TABLE 18.—RATIO OF EDUCATIONAL STATUS OF PRISONERS IN 1923 TO GENERAL POPULATION OVER 21 YEARS OF AGE

Last school attended	Percent in general population	Percent in commitments to prisons
Elementary school	61.1	67.5
High school	25.1	15.4
College	6.7	3.4
School not reported	.....	3.0

Based on Table 11 in *The Prisoner's Antecedents*, p. 19

The same study of federal prisoners shows interesting comparison between the type of offenses and the last school attended.[2] Table 19 summarizes a portion of these data.

In commenting upon the data shown in part in Table 19, the federal study for 1923 concluded:

This comparison, like the figures shown previously, indicates that the best educational standing was among the prisoners convicted of embezzlement, forgery, and fraud. The other offenders against property ranked next in their standing, while comparatively low standing is shown for those convicted of assault, homicide, and violating liquor laws.[3]

Glueck and Glueck in their study of 500 criminal careers report that 90 percent had not gone beyond the eighth grade.[4] Table 20 shows the educational achievement of the 454 offenders for which reliable data existed.

TABLE 20.—EDUCATIONAL ACHIEVEMENT OF 454 PRISONERS

Grade reached	Reformatory group
Never attended school	2.4
5th grade or less	42.6
6th to 8th grade	45.8
9th grade	4.6
High school (1 or more years)	4.4
Completed high school	.2
Total	100.0

Based upon Table 10, p. 132, *500 Criminal Careers*, by Glueck and Glueck.—

In commenting upon the data of Table 20 Glueck and Glueck wrote as follows:[5]

In contrast to the educational achievement of our reformatory group is that of Boston school children in the year 1924-5. During that year 1.4 percent of boys in the public schools of Boston permanently withdrew from school at the fifth grade or lower; 5.3 percent withdrew between the sixth and the eighth grades. Of our reformatory group, but 4.6

[1] See *The Prisoner's Antecedents*, p. 19.
[2] *Ibid.*, p. 21.
[3] See *The Prisoner's Antecedents*, p. 22.
[4] Glueck, Sheldon, and Glueck, Eleanor T. *500 Criminal Careers*. New York: Alfred A. Knopf, 1930, p. 132-34.
[5] *Ibid.*, p. 133.

TABLE 19.—PERCENT DISTRIBUTION BY EDUCATIONAL STATUS, BY SEX, AND OFFENSE OF PERSONS COMMITTED TO PRISON IN 1923

Sex and offense	Percent of total								
		Last school attended							
	Illiterate	1st or 2nd grade	3rd or 4th grade	5th or 6th grade	7th or 8th grade	High school	Trade school	College	School not verified
Both sexes	10.7	6.0	14.9	18.5	28.1	14.4	1.0	3.4	3.0
Male	10.8	6.2	15.0	18.4	27.9	14.3	1.1	3.4	3.0
Homicide	19.7	9.5	18.5	16.7	19.9	6.7	0.6	1.8	6.5
Assault	24.0	10.6	19.4	18.0	18.1	5.2	0.2	1.3	3.2
Larceny	6.1	4.5	12.2	17.0	30.5	19.2	1.5	5.6	3.4
Violating liquor laws	17.3	11.5	18.4	20.5	17.8	9.5	0.4	1.6	2.9
Female	8.5	3.8	12.9	20.4	31.9	16.1	0.6	2.8	2.9
Larceny	4.0	3.5	12.4	16.3	31.2	22.3	1.0	5.4	4.0
Violating drug and liquor laws	16.0	5.1	16.0	14.9	30.3	10.9	.....	3.4	3.4

Based on Table 12, p. 21, in *The Prisoner's Antecedents*.

percent continued in school throughout the ninth grade, while 92 percent of the children in the eighth grade in the year 1922 in Boston public schools entered the ninth grade. In the year 1910, however, which is much nearer the time when our reformatory group attended school, 53 percent of Boston public school children entered the ninth grade.

It is, therefore, clear that the schooling of the reformatory group is far less than that of the general population as represented by Boston public-school children. As the causes for withdrawals from school could not be ascertained in the reformatory group, we were unable to compare the nature of these causes with those among the general population.

Further data on retardation in school and withdrawals[1] of the group investigated led Glueck and Glueck to conclude:

1. One may deduce with sufficient reliability that a considerable number of our group were educationally retarded one or more years.
2. These figures indicate a greater degree of retardation in our group than among the comparable general population.
3. In the matter of age of withdrawal, as well as in educational achievement and in school retardation, our reformatory group does not compare favorably with the general population.

Truancy from the school is now recognized by investigators as one of the first overt acts of the juvenile delinquent. Frequently a "problem" child is retarded, his status produces dissatisfaction, then impudence, punishment, and finally rebellion in the form of truancy. During truancy various contacts, habits, and attitudes are formed which lead him to violate the law. Delinquency, then, is only an extreme form of the problems faced daily by every teacher in the classroom.[2]

Brearley compares the Ayres index ratings for 1918 with the homicide rates. The southern states have the worst records in both homicide and educational efficiency. However, homicide exists in relatively greater amounts in the West than in the East, although the Ayres index rates the western state school systems as superior to those in the East. Brearley concludes that the Ayres rating is of "little aid in determining whether or not the public school system is doing its full duty in crime prevention."[3]

Motion Pictures

According to one well-known authority among the producers of movies, 100,000,000 is the total weekly attendance at moving picture theaters.[4] Of this number at least 8 percent are children's admissions.

A conference on the community and the motion picture was held in New York City in 1929 under the auspices of the producers' and distributors' national association.[5] Various educators, recreation workers, and religious leaders participated, as well as representatives of the commercial agencies. According to the report of the conference, moving pictures were charged with suggesting crimes to children and to adults. Representatives of the producers denied the charge and went on to point out that the newsreel, unlike the newspaper, never refers to current crimes. Little objective evidence was submitted by either side.

Brearley finds that the exact influence of the movie upon anti-social opinion cannot be determined by the existing scanty and inconclusive evidence.[6]

Barnes thinks that the movies depicting prison conditions are creating a public opinion which will demand reform. He writes that "full and relentless publicity turned on our present prison methods is the only cure for barbarism in treating criminals."[7]

Chronological Age

It is doubtful, of course, that the age of the criminal actually stimulates the individual to violate the law. But tabulations of offenses by ages show that certain crimes have appeal at a given age or else that the violation is adapted to persons of a given age and amount of physical energy.

Gehlke and Moley, after a study of criminal cases in New York State in 1925, concluded as follows:

The median age for robberies, perhaps the most serious of the so-called professional crimes, is not over twenty-three, while burglary is fractionally

[1] Glueck and Glueck, *Op. cit.*, p. 133-34.
[2] New York State Crime Commission. *Report, 1930.* Albany, N. Y.: J. B. Lyon Co., 1930. Chapter 9, "The School Role in Crime Prevention." p. 375-433.
[3] Brearley, H. C. *Homicide in the United States*, p. 45.
[4] Hays, Will H. "A Word of Greeting." *Report of the National Conference on Motion Pictures.* New York City. Motion Picture Producers and Distributors of America, 1929. p. 16.
[5] Motion Picture Producers and Distributors of America. *The Community and the Motion Picture.* Report of National Conference on Motion Pictures, September, 24-7, 1929. New York: the Corporation.
[6] Brearley, H. C. *Homicide in the United States*, p. 40.
[7] Barnes, Harry Elmer. *Battling the Crime Wave.* Boston: Stratford Co., 1931. p. 234-37.

lower. The median for forgery and frauds is about thirty, while grand larceny falls somewhere between twenty-five and thirty.[1]

The U. S. Bureau of the Census made a detailed study of the antecedents of about 20,000 persons committed to 102 state and federal institutions in the first six months of 1923. Thirty percent of the group had been separated from their parents before the age of sixteen years. Of the men separated from their parents before the age of sixteen years, the highest proportion were convicted for the following offenses: burglary, 35.1 percent; robbery, 33 percent; having stolen property, 31.9 percent; and larceny, 31.2 percent. Of the women separated from home before sixteen years of age, the largest proportion were arrested for the following offenses: violation of drug and liquor laws, 37.9 percent; sex offenses, 35.2 percent; and larceny, 32.9 percent.[2]

In a report of slightly over 30,000 violators of federal laws who were committed to city and county jails, we find the following median ages for each type of offense:

Law violated	Median ages of Men	Women
Drug act	34.9	30.0
Motor vehicle theft act	22.1	...
Liquor law	35.2	39.3
Mann act	29.5	...
Counterfeiting	29.3	...
Postal law	30.9	22.8
Immigration	24.6	25.2
Interstate commerce act	28.2	...
Other offense	31.1	32.3
Entire group	32.1	32.1

The above tabulation shows that median ages are highest for those prisoners who had violated the drug and liquor laws. The male offenders against the motor vehicle theft act are the youngest group, with a median age of 22.1 years. Among the women, the groups with the youngest median age are those who violated the postal laws.[3]

Intelligence

Criminal law is based partly upon the theory that all citizens have intelligence enough to know the difference between right and wrong. In comparatively recent years the advances of intelligence testing have revealed that there are in reality wide differences in the mental make-up of people. Many investigators believe that persons below a certain level of intelligence should be segregated and given special medical, educational, and social care rather than punishment. Further treatment of the topic of defective intelligence is given below under the heading "Mental Defects."

Recent studies indicate that good or superior intelligence, as well as mental defectiveness, is a factor in crime. A study[4] of the intelligence of white offenders in a Pennsylvania prison showed the following median intelligence quotients:

Type of offense	Median intelligence
Embezzlement	103.75
Burglary	88.2
Robbery	86.4
Larceny	84.8
Forgery	83.3
Homicide	82.7
Arson	73.3
All crimes	77.4

Murchison gave the *Army Alpha Test* to about 4,000 male prisoners and found certain definite variations in intelligence for different types of offenders. Offenders for fraud, blackmail, counterfeiting, robbery, and stealing include a large proportion of those of above-average intelligence. Offenses against drug laws, the carrying of concealed weapons, murder, and arson seem to be committed by persons of all levels of intelligence. Crimes such as vagrancy, abduction, and sex assaults include a larger proportion of those with inferior intelligence ratings.[5]

Care must be taken not to confuse "causal" and "contributing" factors. The level of intelligence has been shown to be only a factor closely *associated* with other influences, but not *the cause* of a specific type of crime.

Mental and Emotional Defects

Up to a few years ago some investigators felt that they had found in mental defects the "major cause" of crime. Studies of prisoners

[1] Gehlke, C. E., and Moley, Raymond. *A Statistical Analysis of the Criminal Cases in the Courts of the State of New York for the Year 1925.* Albany, N. Y.: J. B. Lyon Co., 1927. p. 7.

[2] See *The Prisoner's Antecedents.* p. 30-1.

[3] U. S. Department of Justice, Bureau of Prisons. *Federal Prisoners in Jails, 1929-30.* Washington, D. C.: Government Printing Office, 1931. p. 31-32.

[4] Root, William T., Jr., and others. *A Psychological and Educational Survey of 1,916 Prisoners in the Western Penitentiary of Pennsylvania,* p. 49.

[5] Murchison, Carl. *Criminal Intelligence.* Worcester, Mass.: Clark University, 1926. p. 58-62.

indicated a proportion of feeble-mindedness ranging between 1 and 60 percent, and it was *believed* that these proportions were higher than in the general population. Objective evidence does not exist, however, as to the extent of mental defects among the general population. Hence, recent investigators tend to agree with Sutherland, as follows:

> We find feeble-minded persons well behaved in some situations, delinquent in others; even in one objective situation some feeble-minded persons do not become delinquent. The significance of feeble-mindedness apparently can be determined only when studied in relation to a great many other personal and situational factors.[1]

Recently investigators have turned toward studies of the emotional aspects of mental disorders. These reports tell of the "anti-social tendencies," "psychopathic personality," and similar defects found in persons of normal intelligence. There have been reports of the fact that mental disease or deterioration is found among as many as 12 percent of prison populations. So far little has been done to prove direct causal relationships between crimes and pathological conditions. Glueck questions whether a pathological condition "predestines" one to crime since so many pathological persons outside of the prison do not become criminals because they have the "benefits of suitable environment and the protection which goes with these benefits."[2]

Brearley advances the theory that persons with a low sociological age are most likely to commit homicide when provocation arises. He defines sociological maturity as the ability to adjust one's egocentric wishes to the requirements of the social milieu.[3]

The study of the psychological and psychiatric phases of crime has only begun. Technics for examinations are still imperfect. Types and kinds of mental disorders have not been clearly distinguished. Some enthusiastic investigators concentrate to such an extent upon the criminal's defective or pathological condition that they tend to exclude many environmental factors.[4]

Miscellaneous Factors

There are numerous other so-called "causes" of crime which should be brought to the attention of the socially-minded educator of today. It will be necessary, however, merely to touch upon these briefly at this point:

(1) *Mobility of population*—Bagley suggests that the mobility of families tends to weaken the social controls that go with a settled abode.[5]

(2) *Diversity of social standards*—In the United states we not only have racial groups with their different customs, but the law varies greatly from state to state. These differences make it difficult to create "a respect for law," in the minds of youth.[6]

(3) *Availability of firearms*—Nowhere in the world are pistols so common as in the United States. We shall probably continue our high homicide rate until legislation and public opinion effectively control the sale and carrying of firearms.[6]

(4) *Cultural patterns*—Sections of the United States have their "codes of conduct" which are stronger than the law. Gangs have their peculiar codes. Undoubtedly, these customs supported by group pressure lead to so-called "honor" slayings and assaults.[7]

(5) *Swiftness of justice*—It has been said that in countries where criminals are apprehended, tried, and sentenced with speed, crime loses much of its attractiveness. In other words, punishment to be effective as a deterrent of crime must be sure and swift, and not necessarily physically painful.[8]

(6) *Lawlessness in law enforcement*—Many authorities contend that police brutality (i. e., third degree, etc.) breaks down respect for law and develops hatreds which lead to criminal acts. The evidence indicates that "strong arm methods" are often substituted for skill and intelligence in police work.[9]

Other so-called conditioning factors of crime will be recalled by the reader. Most of these so-called "causes" have been touched upon in the discussion above. Conditions predisposing to crime are many in number and present such varying aspects as the economic, the social, the political, the mental, and the physical. Error arises in examining a particular offense if we over-simplify conditions and center upon any one predisposing factor as the *cause* of a criminal act.

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[1] Sutherland, E. H. *Mental Deficiency and Crime*, p. 373.
[2] Glueck, Sheldon. *First Annual Report of the Psychiatric Clinic, Sing Sing*. p. 12.
[3] Brearley, H. C. *Homicide in the United States*, p. 93-96.
[4] National Commission on Law Observance and Enforcement. *Report on the Causes of Crime, Vol. I*, p. 61.
[5] Bagley, W. C. *Education, Crime, and Social Progress*. New York: Macmillan Co., 1931. p. 25-26.
[6] Brearley, H. C. *Homicide in the United States*. p. 68-77.
[7] *Ibid.*, p. 51-56, 73-74.
[8] *Ibid.*, p. 131-39.
[9] See the *Report on Lawlessness in Law Enforcement*, No. 11, National Commission on Law Observance and Enforcement, June 25, 1931, 347 p., and *Our Lawless Police*, by E. J. Hopkins, Viking Press, 1931, 379 p.

The Factors Associated with Crime and Their Significance to Education

One fact stands out clearly in most investigations of the factors associated with crime: *that environmental factors precipitate the criminal into his misbehavior.* There are thousands of feeble-minded persons, who, in spite of the handicaps of heredity, never offend against the law because they live sheltered lives. Many persons of normal intelligence and physique lead law-abiding lives as long as they avoid such environmental factors as unemployment, evil companions, and poverty.

Among some of the conclusions of interest to educators are the following:

1. Teachers can do much both with children and with adults to sublimate the "gospel of greed" into something more socially constructive. Our stress upon "getting ahead" or "winning the game" is often at the sacrifice of any consideration of the other fellow. Does "success" mean material wealth regardless of how it is obtained?

2. Schools and educators should be molders of public opinion. If current practices in newspapers, movies, and cheap literature in a particular community are factors which predispose to crime, then the schools should cooperate with civic groups in bringing about the necessary improvements. Schools can do much to encourage public support and proper recognition of an efficient police department. By well-directed classroom discussion, teachers can develop attitudes in youth which in adulthood will not tolerate the corruption found today in public office.

3. Local culture patterns and customs which encourage or sanction violence are evidence of the need for new group standards. Among the children of such communities the schools must develop a respect for the basic principles of social living. The parent-teacher groups, adult study classes, law enforcement associations, and similar organizations can aid the school in the promotion of better social standards.

4. Public education owes something to the criminal who returns to the community. If public opinion does not give a new chance, if the school does not offer further education, if teachers and others do not rehabilitate leisure time habits, then there is great probability that the individual will become a second offender. Such a program would require safeguards to protect impressionable boys and girls from the influence of hardened criminals.

5. The amount of illiteracy, even as measured by the relatively superficial methods of the federal census, continues to be a blot upon the national record. More important than "mere ability to read and write" is the use that adults make of their fundamental skills. Do they read constructive books? Do they write letters which bring happiness, or do they write kidnaping notes? Do schools teach pupils to discriminate between tested evidence and the cheap gossip in the daily newspapers? Education must make intensive efforts to carry learning to the point where skills are utilized in socially worthwhile ways.

6. Educators should have a place in city planning. There is evidence that communities can eliminate slums, disease, and other environmental conditions of crime. In their places can be developed model apartments, clinics, parks, social centers, playgrounds, and other devices for making life more wholesome. Visiting teachers and other social workers, who go directly into the homes, can point the way from poverty, disease, ignorance, and economic instability.

A RECREATIONAL program for children has an educational function and may be considered within the scope of the school. This is true of physical education not only as a subject, but as meeting the interests of young people in sports and group games during the time in which they are not engaged in home occupations. This conception of recreation is enforced by a survey recently made of 10,052 children in a great city, which demonstrated that more than 60 percent preferred a recreation program of games or hikes to the motion pictures which 99.94 percent of them attended for want of something better to do.—*The White House Conference on Child Health and Protection. Home and School Cooperation. Report of the Subcommittee on Cooperation of Home and School, Section III C. New York: The Century Co., 1932. p. 7.*

PART IV

The Problem of the Delinquent Child

In the past, parents, teachers, and public have tended to label the maladjusted school child as a dunce, a truant, or an incorrigible, depending upon his particular form of misbehavior. Recent developments of psychological, psychiatric, health, and home-visitation work in the schools have centered attention upon the problem child as the product of problem parents or unwholesome community conditions.

The purpose of this section is to review briefly a number of the investigations that have been made of the maladjusted child. Data will be presented on the potential delinquent as well as upon those who have been before the courts. For the modern viewpoint and further details on delinquency one should consult *The Delinquent Child,* a report of the White House Conference on Child Health and Protection.[1]

Extent of Juvenile Delinquency

The tendency to write or to speak at length upon the degeneracy of the present generation is not a recent phenomenon. An article in the December, 1926, *Atlantic Monthly* shows that sensational statements concerning delinquency have appeared periodically since 1840.[2] Others have reported lamentations on the degeneracy of youth dating back to the twelfth century.

Existing facts, however, permit no one to say with certainty that juvenile delinquency is increasing or decreasing. No national statistics have ever been compiled as to the juvenile arrests. Records of juvenile courts, covering less than one-fifth of the population, have been compiled for 1927, 1928, 1929, and 1930.[3]

Reports issued at various times from several of the large cities, such as Chicago and New York, do not indicate that delinquency has increased out of proportion to the increase of population.[4]

A recent study by Maller of New York City shows that in the decade from 1902 to 1911 there were approximately 85,000 boys brought before the Children's Court as compared with 64,000 cases in the decade just closed. The number of delinquent boys per thousand population has decreased by one-half during the past twenty years. The number of girls brought before the courts never exceeded 200 up to 1924, but since that date it increased about four times that number.[5]

The total number of juvenile delinquents brought before courts each year in the United States has been estimated as approximately 200,000.[6]

General Characteristics of Delinquents

Under the heading, "What Is Juvenile Delinquency," Part I has emphasized the technical connotation of the word "delinquent." This section will present numerous studies of (1) the personal, and (2) the social factors involved in juvenile delinquency. The data are varied, incomplete, and often conflicting. Readers are directed to the summaries on page 167 and page 170 which emphasize the important findings.

Personal Factors

(1) *Race*—The Joint Committee on Negro Child Study in New York City made a study of cases before the Children's Court in that city.[7] Out of the 11,512 cases before this court in 1925, 890, or 8 percent, were negroes. Sixty-one percent of the cases of negro children were delinquents. On the basis of population, the proportion of juvenile delinquency among negroes seemed to the Committee greater than among the whites. The most common charge against

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[1] White House Conference on Child Health and Protection. *The Delinquent Child.* New York: Century Co., 1932. 499 p.

[2] Hulbert, A. B. "The Habit of Going to the Devil." *Atlantic Monthly* 138: 804-806; December, 1926.

[3] Consult the *Report of the Chief of the Children's Bureau* for 1927 (page 17) and other publications of the Children's Bureau, U. S. Department of Labor. Also, *The Delinquent Child,* p. 235-42.

[4] See *The Delinquent Child,* White House Conference on Child Health and Protection. Report of Committee on Socially Handicapped-Delinquency. New York: Century Co., 1932. p. 235-42.

[5] See summary of investigation in Section 10 of the *New York Times,* June 12, 1932, p. 8.

[6] See Part I of this bulletin.

[7] Murray, Virginia M., chairman. *A Study of Delinquent and Neglected Negro Children before the New York City Children's Court, 1925.* p. 6.

the white boys was stealing; that against negro boys, disorderly conduct. The charge second in importance was, for white boys, burglary; for negro boys, desertion of home. In approximately 85 percent of the negro girl delinquency cases, the charge was given as "ungovernable and wayward," or "desertion of home." The study pointed out that while there is considerable provision for mild delinquents among the white children, there is less for colored children than for white, and that even this limited provision is decreasing.

Data assembled in 1930 by the Children's Bureau from eighty-eight juvenile courts showed that in 50,000 cases there were 40,000 whites and 10,000 colored.[1] According to the 1930 census the ratio of whites to colored in the general population is 11 to 1.

(2) *Nativity* — The Sub-Commission on Causes and Effects of Crime, New York State, made a study of 251 boys committed to the Truant School in the Borough of Manhattan.[2] An average of 85 percent of the parents were foreign born; 82 percent of the offenders were native born.

Of the 40,000 juvenile court cases of white children reported in 1930 to the Children's Bureau, 47 percent were from homes where one or both parents were foreign born.[3]

Studies reported by the National Commission on Law Observance and Enforcement indicate that juvenile courts in Chicago have a disproportionate number of delinquents from homes of the foreign born. This is attributed to the residence of these families in areas where delinquency rates are high and where neighborhood controls are weak. Nationality is credited with having little or no effect.[4]

(3) *Sex*—Data from eighty-eight juvenile courts in 1930 showed that the ratio of the number of boys to girls was approximately five to one.[5] A statistical analysis of juvenile delinquency in Salt Lake City, 1923 to 1928, showed seven times as many delinquent boys as delinquent girls.[6] Maller's recent study of New York City showed about 6,500 boys and 900 girls appearing before the Children's Court. In the decade after 1902 the ratio of boys to girls was 60 to 1, and in the past decade the ratio has been 8 to 1. The change has been due to the increase in the number of girls brought before the court.[7]

(4) *Age*—The survey of delinquency in Salt Lake City showed that at least 70 percent of the delinquent boys and girls ranged in age from twelve to sixteen years.[8] In St. Paul, where 460 delinquents were under investigation in 1925, fifteen to sixteen and sixteen to seventeen were the peak years for girls and boys respectively.[8] The largest number of delinquent negro children were found to be between ages of thirteen and sixteen.[9] Fifteen-year-old boys comprised the largest truant group in every grade above the fifth, according to a 1924 report of the Philadelphia Bureau of Compulsory Education.[10] Glueck and Glueck, after an intensive study of five hundred criminal careers, concluded that 27 percent of the group came in conflict with school or police authorities at the age of fourteen years. Seventy-seven percent maladjusted before the age of sixteen years.[11] All of these studies are in substantial agreement with the *Juvenile Court Statistics: 1930* of the Childrens' Bureau wherein 60 percent of the cases in 1930 were of children between the ages of twelve and sixteen.

(5) *Intelligence*—The number of mentally deficient children among the delinquents in St. Paul was nearly five times as great as among the normal school population.[12] Deficiency of the delinquent boy, according to Slawson, is mostly manifested in verbal abstract intelligence, rather than in non-verbal concrete intelligence or mechanical aptitude.[13] A study of problem boys and their brothers showed that

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[1] U. S. Department of Labor, Children's Bureau, *Juvenile Court Statistics*, 1930. Publication No. 212, 1932. p. 6-7.
[2] Shulman, Harry M. *From Truancy to Crime—A Study of 251 Adolescents*. p. 21.
[3] See *Juvenile Court Statistics, 1930*. p. 6-7.
[4] National Commission on Law Observance and Enforcement. *Report on the Causes of Crime, Vol. II*, p. 82-105.
[5] See *Juvenile Court Statistics, 1930*. p. 6-7.
[6] Beeley, Arthur L., director. *Boys and Girls in Salt Lake City*. p. 32.
[7] See summary of Maller's study in Section 10 of the *New York Times*, June 12, 1932, p. 8.
[8] Elmer, M. C. *The Juvenile Delinquent in St. Paul, Minnesota*. p. 3.
[9] Murray, Virginia M., chairman. *Op. cit.*, p. 6.
[10] As quoted in Reed, Anna Yeomans, *Human Waste in Education*. p. 217.
[11] Glueck, Sheldon, and Glueck, Eleanor T. *500 Criminal Careers*. New York: Alfred A. Knopf, 1930. p. 148.
[12] Elmer, M. C. *Op. cit.*, p. 3.
[13] Slawson, John. *The Delinquent Boy*. p. 442.

the problem boys were, on the average, duller than their normal brothers.[1]

The report, *The Delinquent Child,* cites an investigation of 4,000 juvenile court cases of which number 14 percent were feeble-minded. Such data must be accepted critically as there are no comparable data as to the proportion of feeble-mindedness in the general population.[2]

(6) *Mental defect*—Mental examination of 2,647 children in children's courts and detention homes in nine states, by the National Committee on Mental Hygiene, showed about 13 percent to be psychopathic.[3] A clinical and followup study of 246 delinquent girls referred to the University of California Medical School brought out the fact that the defective delinquent seemed to offer a more serious problem than the average delinquent girl.[4] A committee of the White House Conference on Child Health and Protection concluded that mental disease was relatively rare both among children in general and among delinquents. Mental abnormality is apparently a complication rather than a "cause" or characteristic of delinquency.[5]

(7) *Physical status*—Of 620 consecutive admissions, during 1924-25, to the New Jersey State Home for Boys, 5.2 percent showed physical abnormalities.[6] A survey of 316 delinquents in St. Louis showed only a few to be free of physical defects and disease.[7] Among the delinquents in St. Paul, 34 percent showed defect.[8] Slawson has shown that the delinquent boy, particularly the younger delinquent, was on a par in physical maturity with the non-delinquent.[9]

Summary—The data presented up to this point on the characteristics of juvenile delinquents are incomplete and conflicting. It appears that there is a larger proportion of colored children appearing before the courts than should be expected. Homes in which one or both parents are foreign born seem to supply more than their share of juvenile court cases. Both of these conclusions do not indicate "causes" so much as obscure social, economic, and other environmental conditions. Boys have outnumbered girls in appearing before the courts. Whereas the studies previously cited attribute lower intelligence, mental or physical defect, to delinquents as a group, the data are hardly conclusive. As with the data on adults given in Part III, we must conclude tentatively that many juvenile delinquents have physical and mental defects which in association with numerous environmental factors may predispose to crime. Yet hundreds of young people with similar handicaps never develop criminal tendencies due to protection from predisposing environmental factors.

Social Factors

(1) *Home environment*—In the family and home surroundings we have a merging of the conflict between "heredity and environment." Does a defective family strain lead to an unwholesome home environment? Does an unwholesome home lead to a degeneracy of the physical and mental aspects of family life? Apparently a number of factors are at work and investigators are forced to admit the "association" of many influences.

Congestion of population does not affect the juvenile delinquency rate, according to a study in New York City, but bad housing conditions do exert a distinctly harmful influence.[10] A study in Chicago shows, in areas of the city where the culture and the spirit of the citizens are low, that the juvenile delinquency rates are higher than in the so-called "better" districts. Types of juvenile offenses are often characteristic of certain areas of a city.[11]

Of a study of about 20,000 adults committed to one hundred state and federal prisons in 1923, 61.7 percent were living with their families or relatives at the time of the crime. The compiler of the data estimates that the per-

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[1] Shulman, Harry M. *A Study of Problem Boys and Their Brothers.* p. 11.

[2] See *The Delinquent Child.* p. 64-69.

[3] Wade, Frank E., chairman. *The Psychopathic Delinquent.* p. 13.

[4] Walker, Jean. *Factors Contributing to the Delinquency of Defective Girls.* p. 202.

[5] See *The Delinquent Child,* p. 66-67.

[6] Willson, G. M. "Adaptation of Treatment to Cause in Male Juvenile Delinquents." *Journal of the American Institute of Criminal Law and Criminality* 18: 207-17; August, 1927.

[7] Report quoted in Reed, Anna Yeomans. *Op. cit.,* p. 300-08.

[8] Elmer, M. C. *Op. cit.,* p. 3.

[9] Slawson, John. *Op. cit.,* p. 345, 450.

[10] Shulman, Harry M. *A Study of Environmental Factors in Juvenile Delinquency.* Albany, N. Y.: J. B. Lyon Company, 1928. p. 8.

[11] Lashly, Arthur V., director. *Illinois Crime Survey,* p. 662-76. See also, *Report on the Causes of Crime, Vol. II,* 1931. p. 21-188. National Commission on Law Observance and Enforcement.

cent without normal home life is higher than in the general population. Other data in this study indicate a large number of childless marriages, divorces, and separations for both the men and women prisoners.[1]

Case studies show that delinquent and criminal patterns are often transmitted with the family group. Older brothers particularly set examples for the younger members of the family to follow.[2]

The problem of the broken home in relation to delinquency was given intensive study by the National Commission on Law Observance and Enforcement. After a study of a group of 1,675 juvenile court delinquent boys and a control group, the report concludes that " the difference between the rates in the delinquent and the control group furnish a very inadequate basis for the conclusion that the broken home is an important factor in delinquency. This should not be interpreted to mean that the family is not an important factor in behavior problems; but that the broken home, as such, is not a significant measure of the importance of family life in the case of the delinquent boys appearing in the Cook County juvenile court."[3]

Glueck and Glueck found in their study of 500 criminal careers that in 60 percent of the cases abnormal home conditions existed by virtue of the long or complete absence of one or both parents. Death disrupted the family in 60 percent of these cases, and separation, divorce, or desertion accounted for 25 percent more. The families to which the criminals belonged were appreciably larger than the average Massachusetts family.[4]

Forty-six percent of the delinquents studied in St. Paul came from broken homes.[5] The study of the 251 boys committed to the Truant School in Manhattan showed the home status to have been impaired in 52 percent of the families by the death or absence of one parent.[6] Analysis of 620 consecutive admission cases to the New Jersey State Home for Boys showed a large amount of poor supervision in the home.[7] From his study, Slawson concluded that a boy coming from a disintegrated home seemed more apt to become delinquent than one from a home with normal parental relations.[8] After examining studies of this type, Lenroot concluded that "many factors in family life are of greater importance in studying the causation of delinquent behavior than the mere fact of physical completeness or incompleteness of the family circle."[9]

Almost one-third of the parents in the case of the delinquents in St. Paul had a previous bad record.[10] Seventy-eight percent of the parents showed no interest—took a negative attitude or lacked control over the child. Eighty-two percent of the delinquents were antagonistic or had unusually strained relations with their homes.

The proportion of families, one or more of whose members had criminal records, was larger in the case of boys committed to the Truant School for the more serious crimes, than in the case of boys committed for truancy.[11] Thus, 43 percent of families of truants, 50 percent of families of juvenile delinquents, 66 percent of families of misdemeanants, and 83 percent of families of felons had criminal records.

(2) *Employment*—Whether unemployment leads to delinquency or whether the delinquent is not capable of keeping a position may be argued indefinitely. Records of the Jewish Board of Guardians in New York in 1927 and 1928 indicate that the delinquent is very unstable in his employment. After comparing delinquent and non-delinquent groups, the conclusion reached was as follows:

> . . . The miscellaneous cases are apparently twice as stable industrially as the problem cases.
>
> That the employment turn-over among the problem group is a characteristic and not a transient problem, may be gathered from the fact that in its previous year of effort, in 1927, the proportion of cases remaining at a job longer than six months was but 6 percent.[12]

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[1] U. S. Department of Commerce, Bureau of the Census. *The Prisoner's Antecedents.* p. 25-28.
[2] National Commission on Law Observance and Enforcement. *Report on the Causes of Crime, Vol. II,* No. 13, June 26, 1931. p. 135-37.
[3] See the *Report on the Causes of Crime, Vol. II,* p. 284.
[4] Glueck, Sheldon, and Glueck, Eleanor T. *500 Criminal Careers.* p. 122.
[5] Elmer, M. C. *Op. cit.,* p. 3.
[6] Shulman, Harry M. *From Truancy to Crime—A Study of 251 Adolescents.* p. 13.
[7] Willson, G. M. *Op. cit.,* p. 210.
[8] Slawson, John. *Op. cit.,* p. 446.
[9] Lenroot, Katharine. "Discussion of 'Are Broken Homes a Causative Factor in Juvenile Delinquency?' " *Social Forces* 4: 529; May, 1932.
[10] Elmer, M. C. *Op. cit.,* p. 3.
[11] Shulman, Harry M. *From Truancy to Crime—A Study of 251 Adolescents.* p. 14.
[12] Jewish Board of Guardians. *Annual Reports of Vocational Department, 1927-28.* Quoted in New York State Crime Commission, *Report 1930,* p. 448.

The superintendent of th Idaho Industrial School considered idleness as a decided factor in waywardness and delinquency. "A very large percentage of our small boys come in summer and early fall when they are out of school, hence for the most part idle. On the other hand, a correspondingly large percentage of our large boys come during the late fall and winter, when work is scarce and idleness results."[1]

There is considerable doubt that actual labor or work in itself actually "causes" crime or delinquency. However, the continuous contact of children with certain employment conditions, together with other important factors, seems to be associated with an unusual rate of delinquency.

The Children's Bureau found that 12 percent of 273 young newsboys in Columbus in 1922 and 1923 had juvenile court records, although only 2 percent of the boys of the same ages of the city came before the courts in 1927.[2] A study by the Children's Bureau of children in Milwaukee between the ages of fourteen and sixteen showed that more of the working children, than children attending school regularly, have been delinquent at some time in their lives.[3]

Healy and Bronner's study of 2,000 cases of delinquency in Boston showed vocational dissatisfaction as a contributing factor in delinquency.[4] In England, Burt found that 4 percent of the delinquents were vocationally maladjusted.[5]

A commission in California found that the children of seasonal workers who were moved about the state and required to work formed a growing problem.[6]

Several authorities point out that the exploitation of children by employers often comes at the crucial period when children are acquiring important ideals and habits. Missing the opportunity to make normal social adjustments leads to irregular employment later and finally to predatory acts.[7]

(3) *Truancy*—While available statistics may not bring out striking differences between delinquents and non-delinquents with regard to length of time in school, they do emphasize the prevailing amount of truancy among delinquents. A study of the period prior to delinquency of 1,744 cases in the Cleveland public schools credited truancy as the "direct cause" in 74 percent of the cases.[8] Among the 251 adolescents studied by Shulman, the juvenile delinquents had been serious truancy problems in grade 2-A, the misdemeanor and felony groups in 3-B, and the non-delinquent groups in 3-A.[9] Truancy was reported as a major form of delinquency in Salt Lake City.[10] Several studies by the New York State Crime Commission show that truancy is the first overt step in the development of a delinquent or criminal career.[11]

(4) *Motion pictures*—Mitchell inquired into the movie interests, tastes, and experiences of 10,000 children in Chicago.[12] She included in this group typical children of the public schools, juvenile delinquents, and several special groups as the Boy Scouts and Girl Scouts. Most of the data were obtained through questionnaires which the children were not required to sign. Among the conclusions of the study[13] were the following:

1. The present study found that the delinquent children have a wider movie experience than do children in the other two groups (typical school children and Scouts).

2. The movie offers these children (delinquents) an immediate escape from drab realities and cruel certainties of their surroundings and gives them for a brief time another life.

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[1] Vincent, W. D., compiler. *Ninth Biennial Report of the Idaho Industrial Training School, 1919-20.* Quoted by Leeper, Robert D., in "A Study of Juvenile Delinquency in Thirty Counties of Idaho." p. 427.

[2] In a similar study the New York Crime Commission raises the question whether the boys in street trades become delinquents or whether the street trades are unusually attractive to delinquents.

[3] The question may be raised whether or not environmental factors which force children to work at an early age are closely associated with the causes of delinquency.

[4] Healy, William, and Bronner, Augusta F. *Delinquents and Criminals; Their Making and Unmaking.* New York: The Macmillan Company, 1926. p. 182.

[5] Burt, Cyril. *The Young Delinquent.* New York: D. Appleton and Co., 1925. p. 171.

[6] Rieger, Paul, chairman. *Report of the California Commission for the Study of Problem Children.* Sacramento: State Printing Office, 1929. p. 27.

[7] Root, William T., and others. *A Psychological and Educational Survey of 1,916 Prisoners in the Western Penitentiary of Pennsylvania.* Pittsburgh, Pa.: Western Penitentiary. p. 241. (no date). Also *Criminology* by Fred E. Haynes, published by McGraw-Hill Book Co., New York, 1930. p. 156-61.

[8] Quoted in Reed, Anna Yeomans. *Human Waste in Education.* p. 308-15.

[9] Shulman, Harry M. *From Truancy to Crime—A Study of 251 Adolescents.* p. 56.

[10] Beeley, Arthur L., director. *Op. cit.,* p. 32.

[11] See the *Report of the Crime Commission, 1930,* p. 375-433, and the reports for other years. Albany: New York State Crime Commission.

[12] Mitchell, Alice Miller. *Children and Movies.* Chicago: The University of Chicago Press, 1929. 181 p.

[13] *Ibid.,* Chapter 13, "Delinquents and Movies," p. 133-43.

3. A few (delinquents) felt that their conflict with the law had been because of some contact with the movie.

4. The delinquent girls spoke more freely about how restless the movie made them than did the delinquent boys. The boys were more interested in the movie as entertainment and apparently did not look upon it as personally as did the girls.

5. Some (of the delinquents) looked upon them (the movie theaters) as havens from temptation.

6. Not many of the delinquent boys felt that movies generally or any movie in particular were to blame for their delinquency. In fact, quite a few of them said that had they been "in a movie at the time it happened it would not have happened."

7. The delinquent child's extensive contact with the movie may or may not be due to the fact that he is a delinquent and because of the things back of his delinquency. Whether or not the movie enters into his delinquency is a subject for further research and is out of the realm of this study. The present data only show that the delinquent does have a wider movie experience than do the other children studied.

Summary—There is rather definite agreement that juvenile delinquency results from a number of factors. No agreement exists as to origin or relative weight of the various factors. There is evidence that the economic uncertainty and lack of control in the broken home are likely to combine with other factors in producing delinquency. Older brothers who are delinquents often lead younger children into crime. Neighborhoods in which mobility of population weakens the usual social controls tend to have high delinquency rates. Areas with high delinquency rates tend to persist in this condition. Idleness and vacations are associated with increases in delinquency. Street trades and other employments of juveniles either tend to attract or to develop delinquent children. Truancy and conflict at school are usually the first overt acts of the child who later becomes seriously out of adjustment.

Evidence of Maladjustment among School Children

As pointed out in preceding sections of this bulletin, delinquency may be only an extreme phase of child behavior. If children are "delinquent" only in the sense of court sentence, there are many others exhibiting similar behavior who have not yet come to the attention of the courts. From another standpoint, there are many children classed as delinquents who represent victims of misguided effort and undirected energy, who with forethought and individual attention from others might have avoided probation officer and courtroom.

Number of maladjusted children—In every public school, children can be found who seem unable to adapt themselves to the usual requirements of group life in the classroom and on the playground. Are they present in such numbers as to present a serious problem? The Committee on Special Classes of the White House Conference on Child Health and Protection estimates that 675,000, or at least 3 percent of the elementary school enrolment, present behavior problems, less than 10,000 of whom are now enrolled in special classes or schools.[1]

In 1929-30, fifty-five cities of 10,000 population or more reported for twenty-five states a total of 9,040 pupils enrolled in classes for the delinquent and unstable.[2] A study of provisions made for atypical children shows that at least ten states have made provision for mandatory or permissive public school classes for "disciplinary cases." Twenty-eight or 41 percent of cities over 100,000 reported atypical classes during 1928-29. In forty-two cities of this population group, there was an enrolment in these classes during 1927-28 of 4,646, or 5.3 percent of the estimated total number of such cases.[3]

Under the heading "temperamentally atypical," Hilleboe groups the neurotic, the truant, the delinquent, and the incorrigible. This author estimates that 4.80 percent of the school population requires special treatment adapted to this group. An average of .26 percent of the total elementary and junior high-school enrolment in eighteen school systems was found in classes for delinquents.[4]

A study of eight hundred Minneapolis public school pupils showed 51 percent with undesirable behavior patterns.[5]

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[1] White House Conference on Child Health and Protection, Committee on Special Classes (Charles Scott Berry, Chairman). *Special Education: The Handicapped and the Gifted.* p. 6.
[2] Martens, Elise H. *Biennial Survey of Education in the United States.* p. 21.
[3] Kunzig, Robert W. *Public School Education of Atypical Children.* p. 61-3, 75-7.
[4] Hilleboe, Guy L. *Finding and Teaching Atypical Children.* p. 26, 31, 33.
[5] Haggerty, M. E. "The Incidence of Undesirable Behavior in Public School Children." *Journal of Educational Research* 12: 102-22; September, 1925.

Types of behavior problems—The Committee on Special Classes of the White House Conference on Child Health and Protection [1] divides cases of behavior difficulty in three groups:

1. *The nervous*—Children suffering from chorea, speech disorders, encephalitis lethargica, and general nervous disability.
2. *The emotionally unstable*—Cases varying from mild emotional unbalance through cases of definite psychoneurotic and prepsychotic behavior to confirmed cases of advanced mental disorder.
3. *The delinquent*—Cases in the public mind looked upon as resulting from a poor home, bad gang, poverty, sometimes complicated by emotional instability.[2]

A Committee of the National Education Association and the National Conference of Social Work, reporting in 1926, states that:

> Behavior problem children are those who stand out or who differ from others of their group because of certain undesirable habits, personality traits, or behavior in the home, school, or community; whose conduct interferes, or is likely to interfere, with the individual's (or the group's) fullest development and usefulness socially, educationally, or hygienically; and whose behavior may result in more serious handicaps of one sort or another in later life.[3]

The Committee offers a grouping suggestive of behavior problem children:

1. Underlying difficulties indicated by symptoms ordinarily regarded as undesirable habits: such as, thumbsucking, nailbiting, enuresis, masturbation, mannerisms, peculiar food fads, disturbances in sleep.
2. Underlying difficulties indicated chiefly by characteristics and personality traits: such as, sensitiveness, seclusiveness, secretiveness, inattention, apathy, daydreaming, fanciful lying, "nervousness," tendency to cry easily, moodiness, obstinacy, quarrelsomeness, selfishness, laziness, lack of ambition or interest, timidity, cowardliness, general fearfulness, unpopularity or inability to get along with other children, general restlessness and hyperactivity, wanderlust.
3. Underlying difficulties indicated chiefly by such behavior as: disobedience, teasing, bullying, temper tantrums, bragging or showing off, defiance of or rebellion against authority, keeping late hours, seeking bad companions, lying, stealing, truancy, destructiveness, cruelty to persons or animals, unusual sex activities.

The preceding sections have pointed out the extent of, and factors accompanying delinquency. They have shown that a child brought before the court exhibits characteristics or habits present to a greater or less degree in children who have never been apprehended by the law. Since children are essentially individualistic and the school basically social, there will always exist stress, maladjustment, and delinquency. Fortunately, most of the conflicts "will disappear as the teacher interests herself less and less in *what* the child did, and more and more in *why* he did it."[4]

Educational Facilities for Delinquents

The problem of educating the delinquent of school age has two aspects: First, to prevent delinquency by providing special provisions for the problem child, or potential delinquent; second, to rehabilitate the individual who has come in contact with the court.

Special facilities for the care of the nervous, the emotionally unstable, and the delinquent, appear to be meager.[5] The types of school organization developed for these children have been classified as follows: parental schools or homes, special schools, and special classes.

Parental schools—The parental schools for truants or delinquents are usually twenty-four-hour-a-day schools. They assume the entire responsibility for the children's school and nonschool activities. The parental school is located sometimes on a farm, houses the children in cottages, provides regular schooling, emphasizes home life, attempts to build up new social attitudes, and gives the children industrial or homekeeping training.

State laws provide for establishment of twenty-four-hour parental schools in Illinois, Pennsylvania, and California. A few cities have schools maintained in detention homes, and there are other private or semi-private institutions which deal with behavior problems.[6] The average enrolment of these various parental schools is about eighty, with approximately one teacher for every thirty pupils. The school fol-

[1] White House Conference on Child Health and Protection. *Special Education: The Handicapped and the Gifted.* p. 500-02.

[2] For details on this phase see *The Delinquent Child,* White House Conference on Child Health and Protection. Report of Committee on Socially Handicapped—Delinquency. Published by the Century Company, New York, 1932. 499 p.

[3] National Education Association and National Conference of Social Work, Cooperating Committees on Behavior Problems of Children. *Report As Adopted in Joint Session at Cleveland, Ohio, May 27, 1926.* p. 4.

[4] Principals and teachers, in particular, should consult *The Delinquent Child,* p. 41.

[5] In many schools the unstable child is given special work and treatment while he is still a member of a typical class. Where such a plan proves successful, there is reasonable doubt that a potential delinquent should be taken from his normal social group and sent away to a special school.

[6] For names of cities and statistical items see *Special Schools and Classes in Cities of 10,000 Population and More in the United States* by Arch O. Heck, Bulletin, 1930, No. 7, U. S. Office of Education.

lows the regular courses and provides for more handwork[1]

Special schools—Special day schools for truants, incorrigibles, and treatment of special behavior problems have been established in a few of the larger cities. Good examples of such schools are the Thomas A. Edison School for Boys, in Cleveland, and the Montefiore Special School of Chicago.[2]

The work of the special schools is usually divided between regular academic work and shop or other similar activities, such as woodwork, weaving, basketry, mechanics, metal work, mechanical and freehand drawing, elementary sciences, and, where possible, gardening and animal husbandry. The Montefiore School also offers clinical services for treatment of the pupils.[3]

The Thomas A. Edison School for Boys was made a unit of the Cleveland School System in September, 1921.[4] The enrolment on June 20, 1930, amounted to 1,549. The median age represented is 15½ years; the median I. Q. is 87. Boys are transferred to the school, in general, because of educational maladjustment elsewhere.

This school was established to provide for the needs of the boy differing from the normal pupil. It aims to guide and direct, rather than to punish. The boys are classed as nearly homogeneously as possible, according to interests, grade, and I. Q., in about forty groups of approximately equal numbers. In more advanced classes the pupils are divided into a vocational and an academic group. For the latter group the same material is offered as in other academic schools of the city. In the case of the vocational group, however, the conventional curriculum has been abandoned, in favor of material of practical or interesting nature. Work is carefully graded to the ability of the child.

Special classes—There are more special classes for behavior problems than special schools. The classes are usually housed in regular schools and receive a part of the regular principal's time, and the direction of a special supervisor. The special classes attempt to give some special work, but cannot offer as many features as the special schools.[5]

According to a survey of public school education of atypical children, eight states have permissive and two states mandatory legislation concerning classes for "disciplinary or incorrigible" children.[6] Of sixty-eight cities over 100,000 population, 41 percent reported "disciplinary classes"; 12 percent reported probation classes. Enrolment in "disciplinary classes" of forty-two cities of over 100,000 population, in 1927-28, amounted to 4,646. In twenty cities having special classes for problem children, there was an average daily enrolment of 3,198 boys and 286 girls. The minimum class enrolment ranged from 15 to 20. Chronological ages varied from 7 to 24; mental ages from 5 to 16. With exception of classes in three cities, high-school instruction was not given. Five of the ten cities, represented in reports submitted to the Office of Education, established mental standards for admission. The average net school time reported for "disciplinary" classes was 5.4 hours.

Behavior clinics—In addition to parental schools, special schools and classes, a few of the larger cities maintain clinical or adjustment services to help care for behavior cases. In 1928 there were nearly 500 such clinics, distributed among approximately 350 cities in 36 different states.[7]

In 1928 the school system of Berkeley, California began work to meet the needs of children who are considered serious behavior problems.[8] According to a description published of this work:

> Responsibility for meeting these children, for studying their difficulties and diagnosing their needs, for making recommendations for adjustment, and for following up their development has been placed upon a group of specialists comprising psychiatrist, physician, and psychologist, who have at their disposal all the service that can be given by a staff of social workers and psychological assistants. The social workers are a group of five chosen school counselors who give half time to the work of this behavior clinic. The psychologi-

[1] White House Conference on Child Health and Protection. *Special Education: The Handicapped and the Gifted.* p. 493-94, 507-08.
[2] Stullken, Edward H. "School-Juvenile Court Cooperation." *Eleventh Yearbook.* Department of Elementary School Principals, 1932. p. 508-16.
[3] White House Conference on Child Health and Protection. *Special Education: The Handicapped and the Gifted.* p. 494-95, 508.
[4] Cleveland City School District, *Thomas A. Edison School,* cited in bibliography at end of this bulletin.
[5] White House Conference on Child Health and Protection. *Special Education: The Handicapped and the Gifted.* p. 495, 508-09.
[6] Kunzig, Robert W. *Op. cit.,* p. 13, 63, 77, 118-22.
[7] See "Child Guidance Clinics." *School and Society* 30: 704-05; November 23, 1929.
[8] Martens, Elise H. "Berkeley's Coordinated Program of Child Adjustment." *School Life* 16: 23-24, 56-58; October, November, 1930.

cal assistance is given by the assistant director of the bureau of research and guidance, as well as by chosen teachers in the schools who have been carefully trained in the technic of giving mental and educational tests.

This group of specialists at first worked directly in the schools as a type of "traveling clinic," but more recently it has established headquarters at the administration building of the board of education, to which the children are brought by social workers or parents. It is deemed desirable to have father or mother accompany the child, and the behavior clinic undertakes to work only with those children whose parents indicate their willingness to cooperate in the treatment to be given. Such treatment may involve physical attention, medical or surgical aid, readjustment of home conditions, or suggestions to principal and teacher looking toward a better understanding of the child's nature and difficulties. Often several of these factors are involved. All too frequently it is found that the problem child is only the result of problem parents, who themselves need treatment and re-education.

Medical aid is provided at a nominal cost by the health center for those in financial need; the social worker follows up the contacts with the home and reports developments as they occur; the case is discussed with the teacher, counselor, and principal of the school which the child attends, with a resulting increased ability on their part to handle it tactfully. The child may return to the clinic periodically, or he may visit it only occasionally, as the case demands.

Training schools for delinquents—Published material on the education of delinquents deals largely with training of delinquent girls. Reeves has discussed the educational program adopted in fifty-seven training schools for delinquent girls.[1] In the majority of cases, the academic departments in these institutions were about on the same plane as the schools in outside communities. Forty-four institutions had a graded academic school. In twenty-three schools, some high-school work was given. In thirty-eight schools, the academic department follows the course of study in an outside system. In most of the institutions little instruction was offered in art. A number of the academic departments gave a regular public school music course. There appeared a need for right kind of moral instruction. Two of the schools had full-time resident religious workers; one, a part-time resident worker. In none of the schools was there a director of religious education who seemed to be doing the type of work outlined by present leaders in religious education. The field of vocational guidance for delinquent girls seemed almost entirely undeveloped.

On page 292 Reeves presents a statement of certain goals to be sought by the educational system as a whole in a training school:

1. Education in these training schools should be made dynamic and objective, a vital part of the program of rehabilitation of the girl with conduct problems. It should be planned to meet the needs of the individual, both while she is in the institution and later when she returns to the community.
2. Each school should have a comprehensive plan which should include the various phases of education. With proper correlation each part of the educational program will become more vital and worthwhile.
3. These institutions have large opportunity for service as laboratories of research in the educational field. They should be utilized for this purpose as far as is practicable.
4. If any worthwhile educational program is to be successfully carried on, there must be well-trained teachers. In many cases this will necessitate higher salaries.

According to a discussion of correctional education by Van Waters, the major problems of correctional school life are physical education, academic and vocational education, personality adjustment, and sharing group life in the spirit of social solidarity.[2] In conclusion, Van Waters writes that the true value of correctional education consists in the following:

1. Vigorous and joyous health, a sense of physical well-being.
2. Emotional adjustment, a correct understanding of the individual by himself.
3. The restoration of confidence and the respect of the individual for his own personality. This is best accomplished by the discovery of tasks within the strength and capacity of the young person, tasks the performance of which wins merited approval from the group.
4. The individual must develop loyalty and the feeling of friendship or social solidarity, by means of participation in the actual conduct of affairs within the student-group; activity related to a social purpose.
5. New outlets must be formed for the creative energy of youth.
6. The social status of the individual must be restored, that is to say, he must be absorbed into the community, which in its turn must be educated to recognition that the young person has been returned to full citizenship in our humanity.[3]

[1] Reeves, Margaret. *Training Schools for Delinquent Girls.* p. 282-310.
[2] Van Waters, Miriam. *Youth in Conflict.* p. 200.
[3] Van Waters, Miriam. *Ibid.*, p. 221-22.

What Does the Problem of the Delinquent Child Mean to Education?

More than one writer on the problem of maladjusted youth has pointed to the school as a great social laboratory, wherein problem children could be discovered and possible delinquency guarded against. Aside from the general function of the school in providing needed social integration, the preceding studies of juvenile delinquency or irregular behavior bring out the following aspects of special import to educators:

1. A more enlightened public opinion is needed with regard to the unadjusted child, whether delinquent or not. Through newspaper accounts, magazine articles, parent-teacher meetings, and home visits, teachers can explain to adults the significance of various maladjustments of children. Particularly important is this community work at the present time when citizens are likely to label these special welfare activities as "fads and frills."

2. Educators can do much to encourage the establishment of behavior and child guidance clinics where experts may help the child who does not respond to the teachers' efforts. Careful records need to be kept for these clinics. Often the school's regular program must be adjusted to a plan laid down by the psychologist, the psychiatrist, and the medical expert.

3. Truancy has been isolated as one of the first overt acts of a criminal career. Why are children truant? Sometimes they are truant because of factors which have no connection with the school. The chances are, however, that "lock-step teaching," unusually severe discipline, ridicule of playmates, or some other school factor is associated with the truancy. It is up to teachers, principals, and superintendents to discover these points of irritation and to make the necessary adjustments in school procedures.

4. When teachers lack the ability to recognize potential problem cases then they should remedy this deficiency in professional preparation. It is possible to organize study groups under the principal who can call to his assistance the visiting teacher, the school nurse, the doctor, and others. College summer courses are available in psychology and psychiatry. Books and extension classes may be obtained by those who cannot participate in group study.

5. School systems should have the personnel and the facilities to test the intellectual, emotional, and physical condition of every child. Whenever possible, the home should be advised of the defects and urged to correct the inadequacies which may respond to the proper treatment.

6. The fact that a large proportion of delinquents show their maladjustments before the age of fourteen years, places particularly heavy responsibilities on the teachers and principals of elementary schools. Since other problems arise between the ages of fourteen and sixteen, the importance of articulating the elementary school with the junior and senior high schools cannot be overemphasized. School machinery should be flexible enough to account continuously for every child.

7. Unemployment has been found to be associated frequently with delinquency. Some unemployment is due to the failure of students to make the most of their school opportunities for academic and trade training. Teachers and administrative officers, as well as specialists, can guide individuals with their personal, social, and vocational problems.

8. The leisure time hours are often those which lead to questionable companions and unlawful activities. More social centers and play areas in the schools at nights would help to keep children off the streets. Teachers may frequently organize or urge other adults to organize various youth clubs in connection with the schools, the churches, and other centers.

9. Principals of schools can be helpful in organizing community welfare committees to unite schools, churches, homes, business, and social work agencies behind a neighborhood program. There is considerable evidence to support the contention that neighborhood controls are exceptionally useful in preventing all types of delinquency. A neighborhood committee can be the means of eliminating cheap literature, questionable movies, and destructive amusement centers.

10. Teachers today, more than ever before, are called upon to utilize their daily classroom contacts with children in shaping character. A hundred opportunities arise in every day's work to set standards, to vitalize high ideals, and to glorify wholesome contacts. Research clearly indicates that the influence of the classroom teacher is a particularly significant factor in character development.

PART V

The Social Agencies of Crime Prevention

Crime concerns all individuals and groups of organized society. It is not a problem to be left with the police, the courts, and the prison officials. These public officers need the support of public opinion and the active assistance of all (1) to prevent crime, (2) to reform the criminal, and (3) to re-establish the offender as a good citizen.

This section of the bulletin will review briefly some of the agencies and procedures associated with the three lines mentioned immediately above. The treatment will show how the efforts of educators may be integrated with the forces now at work. None of the suggestions in this section are offered as panaceas, but rather as some of the next steps forward. For detailed treatment of some of the major problems touched upon in this section the reader should turn to the standard works in the fields of sociology, government, economics, penology, and education.

The Promotion of Economic Welfare

The type of life lived by the individual citizen and his family is determined by numerous economic factors. A person cannot live in a beautiful home in an exclusive neighborhood, read the best literature, enjoy leisure, and send his children to fine schools—unless he is economically independent. Economic independence has been defined as: "that condition of material wealth which enables a person to support himself and his dependents at an appropriate standard of living without the necessity of accepting charity." [1]

A recent publication of the Department of Classroom Teachers summarizes the basic principles underlying the economic welfare of teachers.[2] These basic principles, applying to all occupational groups, are summarized as follows:

(1) *The worker should receive an adequate salary in accordance with a definite plan based on the increasing usefulness and enlarged responsibilities of the worker which follow additional years of service.* The salary schedule should be based on the actual cost of living at the desired standard in the particular local community. Under no circumstances should a worker be paid less than it actually costs him to live decently and in reasonable comfort. It is highly desirable, also, that the minimum beginning wage be sufficient to permit the saving of a small amount regularly, and the expenditure of a small amount regularly for wholesome recreation and cultural improvement. The amount available for savings should be at least sufficient to provide protection against any ordinary emergencies which may arise.

(2) *The worker should have continuous employment during efficiency.* Few people can maintain their economic independence if they are the victims of long or frequent unemployment. An oversupply of workers, the replacement of men by machines, the seasonal nature of some occupations, petty prejudice or favoritism, economic depression, and the urge toward reduction in the costs of operation are some of the important factors responsible for unemployment among competent workers. Such factors are often very difficult to control, but efforts should be made to eliminate or to counteract them so far as is humanly possible.

(3) *The worker should follow a definite plan of expenditure based on genuine needs and modified in accordance with his income.* The person who spends his income without regard for such a plan runs a dangerous risk. Unless he enjoys an unusually large income he is likely to exceed it at any time and to contract unnecessary debt. Moreover, he and his dependents are likely to suffer from a poorly balanced program of living, with too much emphasis upon the superficial, less essential aspects, and too little emphasis upon self-improvement and cultural development.

(4) *The worker should save a portion of his income systematically and invest it soundly.* In any program of personal finance it is tremendously important that adequate provision be made for increased needs and unforeseen emergencies in the future. No matter how excellent a person's health may be at present, there is no assurance that illness or accident will not overtake him at any time and destroy his earning power, perhaps permanently. If he lives to old age, he will be unble to maintain his former level of efficiency, and will often be unable to compete successfully with younger and more competent persons.

(5) *The worker should secure specific protection against loss of his capacity to render efficient vocation service.* Such protection should cover any loss of capacity due to each of the following specific causes: (1) temporary disability because of illness or accident, (2) early permanent disability, whether from physical or mental causes, (3) superannuation, or the attainment of an age be-

[1] National Education Association, Department of Classroom Teachers. "The Economic Welfare of Teachers." *Sixth Yearbook*, 1931. p. 13.
[2] Ibid, p. 14-18.

yond which efficient work cannot normally be expected, and (4) early death.

(6) *The worker should have protection against the loss of his property.* Fires, thefts, storms, and various kinds of accidents take a huge toll of property each year. These factors are a constant menace to the economic security of property owners, particularly those with relatively small incomes who have invested most of their savings in homes, furniture, automobiles, and similar necessities. Every person, therefore, who acquires destructible property of any considerable financial value should have it insured if this is possible at reasonable rates.

(7) *The worker should have access to credit facilities at reasonable cost.* In spite of all possible efforts to protect the worker against future emergencies by savings, investment, and insurance, occasions will arise in which the need to borrow money is urgent. Especially among persons at the lower salary levels, relatively small amounts are frequently needed over short periods of time. There is, of course, seldom much difficulty in obtaining such loans from one source or another. But it is seldom possible for persons without collateral security to obtain short-time loans at rates of interest in proportion to their means.

Even a superficial observer will note that the seven principles of economic security as noted above are not widely practiced in American life today. Where industry is under socially-minded leadership, the workers may be short-sighted in saving for emergencies. Where the state is progressive in its legislation, the citizens generally may be unable to keep pace. Obviously, the need is for social planning on a large scale.[1]

What can education do with the economic problems? First, as various leaders propose, the school curriculum can give increased attention to the study of the social and economic problems of American life. Second, classes and schools should be extended to give attention to the whole range of intellectual and physical abilities. Third, provision needs to be made for vocational education, guidance, and placement. Fourth, continuation schools are necessary to keep up the schooling of the individual who is forced into industry at an early age. Fifth, provision must be made to re-educate those forced into unemployment by technological changes. Sixth, habits of thrift and socially acceptable ideals should be developed systematically from the beginning of the school experience. Seventh, schools must set up the necessary machinery to capitalize upon the work of the visiting teacher, the psychiatrist, the police, the prison warden, the public health nurse, and similar social experts.

Extension of Public Health and Recreational Activities

Bad housing, disease, and unsanitary conditions are often found in association with the high crime rates of communities. Physical and mental disorders cannot be permitted to go without public attention. By enforcing housing laws, prescribing health regulations, and fostering recreation, organized society prevents conditions in which crime thrives.

Anyone not familiar with the role of ignorance in the health of the typical American community should read *Middletown* by Lynd and Lynd.[2] They report quackery as attempting to cure sickness, immorality and cheapness stalking the leisure hours, shortsightedness characterizing welfare work, and mental difficulties arising from conflicting social standards.

Physical welfare—The physical examinations of the World War revealed numerous physical disabilities among the drafted men. For the first time many citizens began to question whether children should be allowed to grow up without strenuous public efforts to prevent and to remedy the physical handicaps. Recently, the White House Conference on Child Health and Protection[3] has set forth as the fundamental rights of every American child the following:

For every child health protection from birth through adolescence, including periodical health examinations and, where needed, care of specialists and hospital treatment; regular dental examinations and care of the teeth; protective and preventive measures against communicable diseases; the insuring of pure food, pure milk, and pure water.

For every child from birth through adolescence, promotion of health, including health instruction and a health program, wholesome physical and mental recreation, with teachers and leaders adequately trained.

For every child a dwelling-place safe, sanitary, and wholesome, with reasonable provisions for privacy; free from conditions which tend to thwart his development; and a home environment harmonious and enriching.

[1] Consult *Whither Mankind*, Charles A. Beard (editor); *Men and Machines*, Stuart Chase; "Swope's Cure for Hard Times," *Literary Digest* 111: 8-9; October 3, 1931; and similar current treatments of economic difficulties.

[2] Lynd, Robert S., and Lynd, Helen M. *Middletown*. New York: Harcourt, Brace and Co., 1929. 550 p.

[3] See the complete Children's Charter published in the *Addresses and Abstracts of Committee Reports*, White House Conference, 1930. New York: Century Co., 1930. p. 46-47.

For every child education for safety and protection against accidents to which modern conditions subject him—those to which he is directly exposed and those which, through loss or maiming of his parents, affect him indirectly.

Due care should be taken to note that the Children's Charter emphasizes the *community's responsibility* for the physical welfare of children. First, there is the home with its obligations to the child. Second, the school with its medical inspections, teaching of health principles, provision for relaxation period, program of games, special physical exercises, and similar devices. Finally, there are the public health services including disease control, prevention programs, clinics, health surveys, building regulations, sanitary laws, and hospitals.

A report of the White House Conference, *The School Health Program,* presents a comprehensive and forward-looking program for education.[1] A joint committee of the National Education Association and the American Medical Association compiled *Health Education,* a program for public schools.[2] An earlier *Research Bulletin* has listed numerous references in the field of physical health.[3]

Mental hygiene—The Children's Charter sets forth one of the basic rights of children as follows:

For every child who is in conflict with society the right to be dealt with intelligently as society's charge, not society's outcast; with the home, the school, the church, the court, and the institution when needed, shaped to return him whenever possible to the normal stream of life.

The above statement summarizes the new approach to personality and emotional difficulties of problem children. Note the words "the right to be dealt with intelligently as society's charge" which places the responsibility largely upon society for child's maladjustment. Certainly, the responsibility is upon society to provide a remedial program.

Here, as in the case of physical health, the home must assume the first responsibility. Next the school through its trained classroom teachers, psychologists, psychiatrists, visiting teachers, and medical workers must administer its constructive program. Finally, public and private agencies must supplement, extend, and assist the efforts of the home and school.[4]

The possibilities of the school's program in cooperation with the home and various public agencies have been set forth in the publications of the White House Conference on Child Health and Protection. For example: *Organization for the Care of Handicapped Children,* and *The Delinquent Child.*[5] Various books, useful in connection with a school program of mental hygiene, have been listed in a *Research Bulletin* in 1929.[6]

The special problem of the defective—What necessary health measures should society take in the case of those persons who are feeble-minded? Persons working with such handicapped individuals point out the difficulty of ever adjusting the mentally defective to normal social existence.[7]

It has been recommended that the courts should increase their facilities for detecting and treating the offender who is feeble-minded or mentally-diseased.[8]

In light of the menace to society of the presence of mentally irresponsible individuals, social workers have suggested a number of preventive measures that could be employed by society:

(1) Segregation of the insane or feeble-minded in special institutions; and
(2) Sterilization of the mentally or physically diseased, to prevent their reproduction, without at the same time, removing them from normal association.[9]

Up to this time, extensive application of the above measures await advance of public opinion and development of clinical facilities.

Recreation—The Children's Charter demands the following:

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[1] White House Conference on Child Health and Protection. *The School Health Program.* New York: Century Co., 1932. 400 p.

[2] National Education Association and American Medical Association. *Health Education* (Revised). Washington, D. C.: National Education Associaton, 1930. 251 p.

[3] National Education Association, Division of Research. "The Principal and Progressive Movements in Education." *Research Bulletin 7*: 51-58, 95-96; March, 1929. Washington, D. C.: the Association.

[4] An excellent summary of these specialists is found in "The Classroom Teacher and Character Education," *Seventh Yearbook,* Department of Classroom Teachers, National Education Association, 1932. p. 169-80.

[5] Published by Century Co., New York, 1932.

[6] National Education Association, Division of Research. "The Principal and Progressive Movements in Education." *Research Bulletin 7*: 59-66, 96; March, 1929. Washington, D. C.: the Association.

[7] Walker, Jean. "Factors Contributing to the Delinquency of Defective Girls," *University of California Publications in Psychology;* and Davies, Stanley P. *Social Control of the Mentally Deficient.*

[8] Glueck, S. Sheldon. *Mental Disorder and the Criminal Law.* p. 472-74.

[9] Davies, Stanley Powell. *Social Control of the Mentally Deficient,* p. 105-8. See also: Thayer, Walter N., Jr. "Institutions for Defective Delinquents"; Whipple, Helen Davis. *Making Citizens of the Mentally Limited,* listed at end of bulletin.

For every child a community which recognizes and plans for his needs, protects him against physical dangers, moral hazards, and disease; provides him with safe and wholesome places for play and recreation; and makes provision for his cultural and social needs.

As in previously cited declarations of the Children's Charter the emphasis is upon the community's responsibility to safeguard the child's recreation.[1] Studies of delinquent groups show that a large proportion of the individuals had no contact with organized recreational facilities. Delinquency areas were shown to contain less than the minimum amount of play space considered adequate according to social standards.

In addition, available amusements and sources of entertainment have been found to be hardly effective means of character training. The desires of children for novelty or their other interests are often exploited by operators of amusement houses; activities of clubs are unsupervised; and available reading matter lends interest to vice.[2]

Only development of community interest in the child's recreational life and responsibility for the kind of entertainment offered can bring about any material change. Salt Lake City has united various civic and welfare groups in a city-wide program for youth.[3] Elementary school principals in Chicago, Minneapolis, Milwaukee, Newark, and other cities have described their procedures in providing neighborhood recreational and welfare activities.[4] The National Recreation Association and other organizations listed in Part VI of this bulletin have suggestions to offer to those interested in the recreational aspects of child health and protection.[5]

Improving the Agencies of Justice

Upon the police, the judges, the lawyers, and the prison officials falls the major responsibility for meeting the challenge of crime. In recent years these officials have turned to "prevention" as the way to better conditions. There are certain serious weaknesses and strengths of these "wheels of justice" which should be discussed at this point.

Revision and simplification of the law—It is the law that brands the individual as a delinquent or criminal. The whole problem of crime and delinquency cannot be treated adequately without considering the structure of criminal law and the present organization of criminal justice. While any detailed consideration of these legal aspects is outside the scope of this bulletin, a few general points may be brought out. According to Edgar A. Doll:

Many authorities believe that the continuance of obsolete laws or of indefinite laws or of unpopular laws creates situations which engender disrespect for laws in general with consequent social disorder. There is also much antiquated legislation which obstructs police and court procedures, such as rules of evidence, technicalities, systems of appeal, unequal or unreasonable penalties which aggravate rather than ameliorate the control of crime. Other laws may be ineffectual, nonexistent, or subject to abuse, such as those providing for adequate systems of probation, pardon and parole, indeterminate sentence, restitution following criminal offenses, control of the criminal "fence," control of habitual criminals, control of deadly weapons and similar items. We must reckon with existing abuses in the selection and control of juries, and in the whole machinery of our judicial system, such as rules governing expert testimony, loopholes in prosecution, judicial discretion in sentence, probation, place of commitment, fines *vs.* imprisonment, and so on through a long chapter.[6]

What can the schools do about obsolete laws? If the schools send out young citizens who demand the revision of laws and insist upon wise legislative enactments, much progress will be made. After all, public officials are moved by public opinion and that "opinion" should be as socially constructive as possible.

Improvement of court procedures—With respect to future development of court procedure, these improvements, among others, have been suggested: (1) extension to adult criminals of methods and treatment given children of juvenile court age; (2) recognition of the assistance rendered by psychiatry; (3) more centralization of responsibility; (4) establishment of investigating bodies to study procedural

[1] Numerous articles deal with this problem, such as "The Relation of Public Recreation to Delinquency," by Lee F. Hammer, *American City* 40: 119-20; January, 1929.
[2] See *Middletown* by Robert S. Lynd and Helen M. Lynd, published by Harcourt, Brace and Co., New York, 1929, p. 93-502.
[3] Beeley, Arthur L., director. *Boys and Girls in Salt Lake City*. p. 182-83.
[4] National Education Association, Department of Elementary School Principals. "The Principal and His Community." *Eleventh Yearbook*. Chapters VI and IX in particular.
[5] U. S. Department of Labor, Children's Bureau. *Public Dance Hall*. Publication No. 189. Washington, D. C.: Government Printing Office, 1929. p. 36-50.
[6] Doll, Edgar A. "The Control of Crime," *Scientific Monthly* 26: 553-54; June, 1928.

problems.[1] Cooperation with the juvenile courts and the development of fine attitudes toward the courts are important contributions of the school in making the public tribunals highly effective.

Ethics of the legal profession—In recent years some of the practices of lawyers have brought sharply to public attention the professional ethics of the bar. The devices resorted to in court to influence juries, the attempts to excite public opinion through the newspapers, the stampede of high legal talent to support the cases of criminals, the "ambulance chasers," and similar petty tactics have lost much prestige for the legal profession.[2] Fortunately, there are strong local, state, and national professional associations at work to establish high levels of social conduct and service.

Lawlessness in law enforcement—The National Commission on Law Observance and Enforcement has discussed police brutality as exemplified by the third degree.[3] Much can be said on both sides of this problem. Public opinion is so indifferent when the police are injured or even killed that enforcement officers claim that they must be brutal in self-defense. At the same time one is impressed by the infrequent use of firearms and the lack of brutality reported as common among the police of the British Isles. The police of Berkeley, California, and in other cities exemplify in this country the development of the scientific, highly-trained police officer.

Schools working with the crime prevention bureaus of police departments can establish many right attitudes toward the police and law enforcement. Upon state colleges and universities should fall responsibility for training skilled and intelligent enforcement officials.

Probation and parole—Prison officials have long been urging the advantages of probation and parole. First, it costs about $40 a year for each person on probation and $20 to supervise each one on parole while maintenance in an institution ranges from $300 to $550 per year.[4] Second, penologists and wardens agree that many persons are now sent to prisons when it is wholly unnecessary. These persons are sufficiently punished by the sentence, and under proper guidance can be kept in society in the role of good citizens. Third, a system of parole permits society to release prisoners under supervision which is better than unconditional freedom.

Parole is also a device advocated by prison officials as a means of making the treatment of prisoners more flexible. Wardens and other experts at the prison are usually qualified to determine when a prisoner should be returned to society. Because of the obsolete practice of meting out so many years of punishment for certain types of crimes, the warden is unable to treat his prisoners in accordance with the many physical, mental, and social differences.

Schools have opportunities and obligations with children who are on probation. How can these youngsters be interested in constructive work? How can the original predisposing environment be modified? How can school officials cooperate with probation and court officials?

With offenders on parole public education should have something to offer in the way of opportunities for vocational and social rehabilitation.

Educational programs of prisons and reformatories—Reports of educational work in the prisons are far from encouraging. In fact, MacCormick has stated that, "Of all the fields in which the American penal institution gives evidence of futility, education very nearly heads the list."[5] During 1927-28 MacCormick visited the prisons and reformatories for men and women in this country. Not a single complete and well-rounded educational program, adequately financed and staffed, was found in the prisons.

A discussion of present provisions by Best reports that the proportion of prisoners attending school varies for adults in different institutions from one-fifth to two-fifths. In most institutions there are one civilian teacher and one or more convict teachers. The maximum time in one day devoted to instruction is three or

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[1] For discussions of needed improvements in the courts, see: Haynes, Fred E., *Criminology*, p. 111-16; Pound, Roscoe, *Criminal Justice in America*, p. 177-78, 188-91; Callender, Clarence N., *American Courts*, p. 224-30. These sources are listed at the end of this bulletin.

[2] See *A Lawyer Tells the Truth* by Morris Gisnet; Published by J. P. Kahn Co., New York, 1931. 160 p.

[3] National Commission on Law Observance and Enforcement. *Report on Lawlessness in Law Enforcement*, No. 11, June 25, 1931. Washington, D. C.: Government Printing Office, 1931. 347 p.

[4] National Commission on Law Observance and Enforcement. *Report on Penal Institutions, Probation, and Parole*, No. 9, June 23, 1931. Washington, D. C.: Government Printing Office, 1931. 344 p.

[5] MacCormick, Austin H. *The Education of Adult Prisoners*, p. 38.

four hours. Instruction is generally of an elementary order, ranging, as a rule, from the fourth to the eighth grades. The subjects taught are mostly reading and writing, with possibly some civics, commercial subjects, and music.[1]

Libraries and reading materials constitute an element in educating prisoners. However, lack of funds and trained supervision have prevented library work among prisons from proving its value. Correspondence instruction has proved its validity in several institutions.[2]

In the prisons vocational training is given only incidentally in industries, on the prison farm, or in connection with maintenance details.[3] A few prisoners are taking vocational courses by correspondence, "but almost without exception they choose their courses without guidance, pay for them from their own funds, and study them without assistance from the prison authorities." Reformatories for men have usually set up fairly elaborate programs of vocational education. Reformatories for women have a better opportunity than institutions for men to set up successful programs of vocational education, because the work of the institution provides training in so many occupations which women can enter after leaving the institution.

Stutsman in his *Curing the Criminal* presents on pages 185-86 a model educational plan, representing a composite of present institutional work:

A. Literary and scholastic studies should be adopted according to the individual needs of the population, as follows:
   (1) Reading, writing, spelling, grammar, rhetoric, English composition, English literature, debating, and language study.
   (2) Arithmetic, algebra, geometry, trigonometry, surveying, and astronomy.
   (3) Physics, chemistry, physiology, geography, natural history.
   (4) Geography, history, civics, etc.
   (5) Other studies as demanded.

B. Trade apprenticeship in blacksmithing, carpentry bricklaying, plastering, stone masonry, cement finishing, painting, decorating, structural iron work, automobile repairing, mechanics, etc.

C. Agricultural training, using the various farm departments as a laboratory. These studies would embrace: stock raising, judging stock, dairying, poultry raising, agronomy, horticulture, floriculture, entomology, etc.

D. Engineering and kindred courses in mechanical engineering, electrical engineering, civil engineering, mechanical drafting, architecture, drafting, efficiency engineering, accounting, etc.

E. Cultural training in music, music-appreciation, art, drama, etc., using the recreational activities for exhibition purposes.

F. Ethical and religious instruction. The regular religious services under the direction of the chaplain should be augmented by ethical instruction for the entire population. An evening each week at which educational moving pictures are shown, and followed by ethical talks on character, habits, honesty, truthfulness, our relation to society, etc., presented by various successful business men, teachers, and professional men, in an interesting manner.

G. Exhibitions, such as debates, dramatic presentations, musicals, etc. A prison paper to which all may contribute under the censorship of the educational director.

Religion a Vital Force

The keynote of many current discussions of religious organizations and teaching is negative. Some writers believe that present religious cults are declining in influence and that the church retains neither adults nor children. However, it cannot be denied that a powerful motive for "good citizenship" is to be found in religious ideals and teachings.

Practically all of the states have constitutional or statutory provisions expressly prohibiting sectarian instruction or teaching of religious doctrines in public schools. The reading of the Bible in public schools is required by statute in eleven states. While creed and controversial doctrines must be left to the church and to the home, there are fundamental religious experiences in which the school can participate. In this respect, the Commission on Character Education has stated:

> It is commonly thought that the public schools must refrain from taking part in the teaching of religion. It is true that the schools cannot attempt to settle the controversial matters of doctrine or creed, but surely the schools can deal with those experiences which are fundamental to the impulses and attitudes essential to religion. A study of the age-long yearnings and strivings of humanity must tend to make the individual religious in a fundamental sense. Where appreciation of the needs of the world is developed and a desire to share in meeting those needs is created, surely a religious

[1] Best, Harry. *Crime and the Criminal Law in the United States.* p. 468-70.

[2] MacCormick, Austin H. *Op. cit.* See Chapter 10. "The Library as an Agency of Education," p. 150-79. Also, Chapter 14, "Correspondence Instruction and University Extension Service," p. 216-31.

[3] MacCormick, Austin H. *Op. cit.* See Chapter 9, "Vocational Education," p. 99-149. Also, Best, Harry. *Op. cit.* p. 470-72.

impulse has been gained. The world today needs religion as much as it ever did, perhaps more. This need can be met only by means of religious interpretation and leadership in terms of life as it is today. The schools can do much to prepare the way for such interpretation and such leadership.[1]

The Need for an Intelligent Public Opinion

As one of six reasons for increase of crimes of violence during the last fifty years, is suggested: "The apathy and indifference of our best citizens toward their duty as citizens."[2] Previous sections of this bulletin have stressed the desirability of altering certain undesirable attitudes toward the juvenile delinquent and the adult criminal. Reform in police methods, prison practices, court procedures, and aspects of the problem must be supported by an enlightened public opinion. The individual citizen should help to alleviate the causes of crime by demanding wise legislation and impartial enforcement. In brief, every prophylactic of crime depends ultimately upon active public support for its success.[3]

The School's Opportunity in Cooperation with Other Agencies of Society

The place of education in the prevention of crime has received much attention from criminologists as well as from educators. Emphasis has been given largely to the strategic position in society occupied by the schools. Part IV has described in brief the special classes and schools already available for children who are temperamentally atypical. There are other ways, however, in which the schools make a more positive approach to crime and delinquency.

(1) *The home*—Even though present-day sociologists deplore the status of the family as a unit of control, for many years of the individual's life the home is the chief influence. The home has the last word in what the child eats, wears, thinks, and does. It determines his ideals and associates. Education is given both consciously and unconsciously. Imitation and suggestion mold the child's character. The home consciously instructs the child in forms of courtesy, domestic life, literature, religion, sex and morality, play, and in some cases, industry.

Home and school cooperation is necessary to insure the happiness and development of children.[4] Such cooperation requires that the school take account of the extent and quality of the home training. It should encourage better home conditions in such matters as food, ventilation, clothing, sanitation. Agencies assisting in securing this cooperation are parent-teacher associations, school exhibits, visiting days for parents, visiting teachers and nurses, and systems of full and frequent reports.[5]

In a number of cities a complete study of a problem child requires that the visiting teacher call upon the parents. In these visits the teacher often discovers back of the "problem child" such home conditions as the following: (1) indulgence of the child, (2) great severity by parents, (3) uncooperative attitude toward the school, and (4) no adult supervision of the child. Often the visiting teacher discovers outstanding assets in the home which the school can use in its program.[6]

As the home may contribute in a helpful or destructive way to the school program, the school makes a distinct contribution to the stability and cultural level of the home. Departments and officers within the school system specially promoting home and school cooperation are these: the visiting teacher, health service department, department of census and attendance, the research department, and counseling program. The subject of home and school cooperation is given extensive treatment in Chapter 14 of the *Tenth Yearbook* of the Department of Superintendence, National Education Association.[7]

(2) *The community*—There has been apparent a consistent growth in use of schools as social, civic, recreational, or neighborhood cen-

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[1] National Education Association, Department of Superintendence. "Character Education," *Tenth Yearbook*, 1932. p. 190.

[2] Strawn, Silas H. *Fifty Years' Progress in Law*. p. 189.

[3] Consult the bibliography at the end of this bulletin for further discussion of the importance of public understanding and support.

[4] Reeve, Mrs. A. H., Chairman. *Home and School Cooperation*. Report of the White House Conference on Child Health and Protection. New York: Century Co., 1932. 122 p.

[5] See "Home Contacts Sought by the School" and other chapters in the 1932 Yearbook, Department of Elementary School Principals, National Education Association.

[6] Culbert, Jane F. *The Visiting Teacher at Work*. p. 47.

[7] National Education Association, Department of Superintendence. "Character Education," *Tenth Yearbook*, 1932. p. 315-32.

ters.[1] Wider use of the school plant has been stimulated by university extension divisions, state departments of public instruction, private organizations, and day school groups. Schoolhouses are now very generally used for community purposes, though only 5½ percent are used regularly and as often as once a week. The school would appear to be a natural community center, especially in the case of the consolidated rural school.[2]

The schoolhouse has been used for lecture courses, public library purposes, art exhibitions, concerts, and pageants. The 1932 yearbook of the Department of Elementary School Principals describes how the school may be used as an employment center, a health and recreation center, or a civic center.[3] The many values of such use of the schoolhouse have been emphasized. For instance, by provision of healthful leisure-time activities, the school center is helping to break down the barriers between people of different creeds, nationalities, social and economic strata, thus creating a basis for friendly contact among them. In making available a constructive means of self-expression, the school center is increasing the happiness and worth of the individual.

(3) *Juvenile courts*—There is a growing tendency for school authorities, trained in the newer technics and viewpoints of child psychology, to handle maladjusted cases formerly referred to the juvenile courts. In a few cities the court and school authorities have developed coordinating child welfare units.[4] These units are guided by the theory "that maladjustment has definite causal factors of a physical, mental, or environmental nature which should be recognized and carefully considered before the child himself is held responsible."

The Jersey City organization established in February, 1931, under the superintendent of schools, includes twenty-five attendance officers, six visiting teachers, five plain clothes police officers, a medical inspector, a dental inspector, a nurse, a psychologist, and a psychiatrist.[5] In handling school cases the procedure is as follows:

1. Children showing definite signs of abnormal physical or mental conditions are reported to the Bureau of Special Service on special forms prepared for such reports. Accompanying this report is a complete statement of the school history on the permanent record card of the school system, as well as the analytical statement of personality traits, recreational habits and interests, and any special indications of maladjustment.

2. These cases are then referred to the visiting teachers for complete investigation of both home and school conditions. This record becomes a cumulative one by means of weekly follow-up visits by the visiting teachers.

3. All children are scheduled for complete clinical examination in the light of the information gained from school and home. Special attention is given to sensory defects due to the alarming number which have been found to escape detection by the classroom teachers.

4. Weekly conferences are held for the discussion of these cases in an attempt to formulate a well-rounded judgment of the proper way of handling each individual.

5. Recommendations are made to the superintendent of schools regarding the necessity for transferring children to the various special classes and schools. Further than this, recommendations are also made for the establishment of additional classes of a given type or additional types of classes.

Delinquent children located by the police are handled as follows:

1. Whenever a child is detected committing some juvenile offense of sufficient importance to demand police attention, he is escorted to his home by the officer who secures the name, age, address, and school attended. The following day a complete report is made to the captain of the police detail assigned to this Bureau giving the above information together with the offense committed by the child.

2. Parents are notified to present themselves at the office of the Bureau of Special Service accompanied by the child for a conference concerning the reported offense.

3. Complete statements are taken from parents and children regarding the family conditions, home life, and recreational habits of the child. They are given to understand that continuance of such offenses will lead to serious difficulty and are advised in regard to the regulation of the children's habits along constructive lines.

4. All of these cases are given the same clinical examinations as that described for those reported

[1] For information on community use of schools in the United States, see Glueck, Eleanor Touroff. *The Community Use of Schools*, listed in bibliography at end of bulletin.

[2] Mueller, A. D. *Progressive Trends in Rural Education*. See Chapter 16, "The Rural Community Center." p. 313-33.

[3] See "Community Center Activities," Chapter VI, *Eleventh Yearbook*, Department of Elementary School Principals, 1932. p. 312-44.

[4] See "The Institute for Juvenile Research and the School System," *Eleventh Yearbook*, Department of Elementary School Principals, 1932. p. 534-40.

[5] Data on the Bureau of Special Service of the Jersey City school system were supplied to the Research Division by Superintendent James A. Nugent. Space limitations prevent the publication of statistics showing the success of Superintendent Nugent's program.

by the school authorities, and the parents are advised in regard to necessary treatment.

5. Follow-up visits are made to the home and the school by plain clothes officers who secure information regarding the child's activities until such time as there is sufficient evidence that there is no further need for this follow-up work.

6. In those cases where parents show the proper cooperation, and still the children continue to be delinquent, the child is taken before the juvenile court with a complete statement of the case and the desirability of a correctional insitution is decided by the judge. This procedure has been necesssary in less than 10 percent of the cases which were formerly automatically referred to such a court.

Even in school systems where no such complete organization can be established, there are at least three ways in which the school systems may help: (1) through the establishment of research bureaus to study child behavior; (2) by the improvement of each classroom situation so as to reduce pupil maladjustment to the minimum;[1] and (3) by full cooperation with juvenile court authorities.[2]

Adult education—Of significance for educational organization are the studies of adult learning published within the last five years.[3] While it was popularly believed that learning capacity declined with age, actual experiments seemed to indicate that the older student is as capable of acquiring knowledge and skills as the younger student, and perhaps more so.

Approximately 900,000 men and women are enrolled in public evening schools annually.[4] It is estimated that 1,500,000 new students are enrolled each year by private correspondence schools. The total enrolment of university extension students in the United States, exclusive of agricultural extension, was estimated at 250,000 in 1929. Associations originally organized for religious and social purposes maintain auxiliary educational activities.

The significance of adult education as a means of curbing crime perhaps lies to a large extent in the possibility of reaching parents.[5] Since many evidences of maladjustment appear in early childhood, the parents, as well as teachers, should know how to handle behavior problems. Parent education has been called "a new force in education."[6] Large numbers of parents have realized the value of systematic group study of their common problems. Material of assistance to them has been made available through the Child Study Association of America, American Association of University Women, National Congress of Parents and Teachers, as well as child welfare research stations.

Vocational maladjustment has been suggested as a factor in crime. This suggestion emphasizes the desirability of retaining children in school as long as possible, establishing educational facilities for workers,[7] and providing some opportunity for re-educating those forced into idleness by technological changes in industry The Workers' Education Bureau enrols fifty national and inter-national unions, eleven state federations, thirty-six central city labor bodies, sixty local unions, twenty trade union colleges and study groups, and six co-operative and student associations. The residential labor college at Brookwood was established in 1921 at Katonah, New York. The International Ladies' Garment Workers' Union, a pioneer in workers' education, has the most highly developed educational program among national unions. Other labor colleges are the Boston Trade Union College, Philadelphia Labor College, Cincinnati Labor College, and Portland (Ore.) Labor College.

Character education — Criminologists and penologists have pointed out the school's opportunity for crime prevention. Warden Lawes of Sing Sing Prison insists that schools must extend themselves beyond any mere "illiteracy campaign" if they are to develop in pupils a responsive social outlook.[8] Other statements emphasizing the character developing responsibilities of education are as follows:

Upon the matter of possible juvenile delinquency, and perhaps also upon the matter of future adult

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[1] Wickman's study of teachers' attitudes in behavior cases shows that many teachers are unfamiliar with the recent research and viewpoint of child psychology. See *Children's Behavior and Teachers' Attitudes*, Commonwealth Fund, New York, 1928. 247 p.

[2] The problem of school-juvenile court relationship has been discussed by LeRoy F. Jackson in "Public Schools and Probation," *Probation* 10: 1-2; February, 1932. Consult various publications of the National Probation Association and the Children's Bureau, U. S. Department of Labor.

[3] See Thorndike, Edward L., and others. *Adult Learning*, Macmillan, 1928, 335 p.

[4] Cartwright, Morse A. and Ely, Mary. *Adult Education in the United States of America*. p. 5, 8, 10.

[5] For example, *Intelligent Parenthood*, Proceedings of the Mid-west Conference on Parent Education, University of Chicago Press, 1926, 326 p.

[6] For discussions of the potentialities of parent-teacher cooperation, see: National Congress of Parents and Teachers. *A New Force in Education*, listed in bibliography at end of this bulletin.

[7] For discussion of workers' education, see Peffer, Nathaniel. *New Schools for Older Students*. p. 203-43.

[8] Lawes, Lewis E. "A Warden Looks at Education." *New York Times Magazine*, July 31, 1932, p. 1-2, 13.

criminality, the school can never have other than a great bearing. A large part of the child's waking hours are in its hands, and under its influences—and at a time when the child's character and interests are subject to almost measureless shaping and molding. Upon its schools society places a heavy responsibility. It expects them to give the child committed to their care an equipment that will make of him a good citizen and not a potential law-breaker[1]

The nation's budget for crime has been shown to be about three times its expenditure for education. The reversal of these figures would bring salutary results without costing us an additional penny. It is probably safe to assert that the trebling of our budget for scientific education should reduce the cost of crime by two-thirds. This does not take into consideration the social and spiritual results which would accompany this transition.[2]

It has remained the task of the educator to develop methods and objectives of direct and indirect moral instruction.[3] The *Tenth Yearbook* of the Department of Superintendence, and the *Seventh Yearbook* of the Department of Classroom Teachers are devoted to the subject of character education.[4] These yearbooks do not set forth curriculums for character education as such, but present points-of-view looking toward development of more comprehensive and more constructive school life. They take up the theory, agencies, and objectives of character education, the part played by classroom procedure, individual counseling, school organization and administration. With respect to the curriculum, the attitude taken is that "any curriculum that makes a sincere, intelligent, and courageous approach to the real problem of living is a character education curriculum."

The final pages of Chapter 9 of one of the yearbooks present the "Cardinal Principles of Education," restated in the language of character education. The potentialities of the schools are suggested in the outline. The principal divisions of the outline are to this effect.[5]

A. Is our school program meeting the intellectual needs of our boys and girls?

B. Are our boys and girls getting some understanding of the major fields of occupations and professions together with an appreciation of their opportunities and requirements?

C. Are our boys and girls intelligent and responsive to the requirements of health?

D. Are our pupils growing in understanding of the principles upon which our nation is founded—freedom, equality, implications of democracy, meaning of patriotism? Are these principles vital in the life of the school?

E. Is the school preparing its pupils to use leisure time worthily?

F. Are our boys and girls forming satisfactory standards of social relationships: (1) toward their contemporaries both of their own and of the opposite sex, (2) toward the "elders" of their environment—parents, teachers, civic leaders, (3) toward the handicapped of society?

G. Are our pupils acquiring ethical habits of conduct—playing fair, owning up, being honest in work, learning to respect the rights and property of others? Are they learning to regulate conduct in terms of consequences to themselves and to others? Are the more thoughtful and mature learning to regulate their conduct in terms of accepted principles?

H. Are our boys and girls acquiring a sense of personal debt to others for their part in building up a civilization for us; a debt to the institutions of family, school, church, community, government, and past civilizations?

I. Are our children becoming sensitive and responsive to the needs of others; to the need for friendly companionship on the part of new pupils; to the need for friendliness and toleration on the part of those who are "different" in dress, in speech, in nationality, and in temperament; to the need for helpfulness on the part of those who are strange or have fallen behind in their work?

School efficiency—Research and competent opinion both assign to the public schools and other agencies of education a major rôle in the prevention of crime. As Warden Lawes of Sing Sing Prison has pointed out, the proper discharge of this obligation will require (1) a higher standard for teachers, (2) smaller classes to permit attention to individual differences, and (3) a new conception of the social and scholastic goals of education. While those improvements would require more expenditures for public education, ultimately the public budget would be balanced because of the relatively smaller expenditures for courts, police work, and custodial care.[6]

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[1] Best, Harry. *Crime and the Criminal Law in the United States.* p. 578.

[2] Parsons, Philip Archibald. *Crime and the Criminal.* p. 370.

[3] For tests of personality and character see the *Review of Educational Research,* American Educational Research Association, June, 1932. 88 p.

[4] National Education Association, Department of Superintendence. "Character Education." *Tenth Yearbook,* 1932. 535 p. Also, Department of Classroom Teachers, "The Classroom Teacher and Character Education." *Seventh Yearbook,* 1932. 272 p.

[5] National Education Association, Department of Superintendence. "Character Education," *Tenth Yearbook,* 1932. p. 239-42.

[6] See "A Warden Looks at Education." *New York Times Magazine,* July 31, 1932. p. 1-2, 13.

But the problem is more than one of improving the existing school machinery. There is a need (1) to carry the advantages of modern education to every rural child,[1] and (2) to extend the period of exposure to modern education by increasing the holding power of the schools.[2] However excellent the educational facilities provided by the state, they are effective to the extent that they reach those for whom the schools are intended.

Conclusion

This bulletin has summarized the social and individual aspects of crime. Studies have been presented to show the association of crime conditions with intelligence, race, age, sex, mental disease, and other individual criminal characteristics. Other studies have indicated the connection between crime and such social conditions as unemployment, crowded living conditions, inadequate recreational facilities, and the broken home. While these investigations show that the normal individual must be responsible for many of his acts—*the modern viewpoint emphasizes society's responsibility to prevent and to remove the underlying environmental causes of crime.*

Horace Mann sounded the "social concept of crime prevention" as early as 1845 when he wrote:

> If it is proved, with a reasonable degree of certainty, that ninety-nine, ninety-five, ninety, eighty, or any other given percentage of all children can be rescued from vice and crime, and can be so educated and trained as to become valuable citizens, but the State refuses or declines to do this work, then the State itself becomes a culprit; and, before the great moral Judge who is seated on the throne of the universe, it must stand a spectacle of shame and guilt, like one of its own inferior culprits before its own judicial tribunals.[3]

The school is the social agency strategically placed to develop good citizens. Society expects the school to accept every child regardless of "race, or color, or situation"—and to "develop in each individual the knowledge, interests, ideals, habits, and powers whereby he will find his place and use that place to shape both himself and the society toward ever nobler ends."[4] Obviously, such a stupendous educational task cannot be accomplished without continuous cooperation between the school, the home, the government, the church, and the other important agencies of society.

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[1] National Education Association, Division of Research. "The Outlook for Rural Education." *Research Bulletin* 9: 230-302; September, 1931.

[2] National Education Association, Division of Research. "Estimating State School Efficiency." *Research Bulletin* 10: 76-132; May, 1932.

[3] See *Life and Works of Horace Mann*, Vol. IV. Boston: Lee and Shepard Publishers, 1891. p. 159.

[4] National Education Association, Commission on the Reorganization of Secondary Education. *Cardinal Principles of Education.* Bulletin, 1918, No. 35, Office of Education. Washington, D. C.: Government Printing Office, p. 9.

> GOVERNMENTS DO NOT see the future criminal or pauper in the neglected child, and therefore they sit calmly by, until roused from their stupor by the cry of hunger or the spectacle of crime. They erect the almshouse, the prison, and the gibbet, to arrest or mitigate the evils which timely caution might have prevented. The courts and the ministers of justice sit by until the petty delinquencies of youth glare out in the enormities of adult crime; and then they doom to the prison or the gallows those enemies to society, who, under wise and well-applied influences, might have been supports and ornaments of the social fabric.—*Horace Mann. Life and Works of Horace Mann, Vol. IV. Boston: Lee and Shepard Publishers, 1891. p. 6.*

PART VI

Organizations Interested in Crime Prevention

In the preceding sections of this bulletin, reference has been made to the activities and publications of different organizations in the fields of education, law, and social work. The studies, bulletins, and reports of these organizations are of special interest to students of the whole problem of crime and delinquency. Below the names and addresses of a number of the most active organizations are given for reference. For lists of other agencies one may consult the *Handbook of Social Resources of the United States* of the American Red Cross; and *A Handbook of Educational Organizations* of the federal Office of Education.

Name of organization	Address
American Academy of Political and Social Science.	3457 Walnut St. Philadelphia, Pa.
American Association for Adult Education.	60 East 42d St. New York City, N. Y.
American Association of Psychiatric Social Workers.	41 East 57th St. New York City, N. Y.
American Bar Association	1140 North Dearborn St. Chicago, Ill.
American Bankers Association	22 East 40th St. New York City, N. Y.
American Family Welfare Association.	130 East 22nd St. New York City, N. Y.
American Foundation for Mental Hygiene.	450 Seventh Ave. New York City, N. Y.
American Institute of Criminal Law and Criminology.	1028 Land Title Bldg. Philadelphia, Pa.
American Medical Association	535 North Dearborn St. Chicago, Ill.
American Prison Association	135 East 15th St. New York City, N. Y.
American Public Welfare Association.	850 East 58th St. New York City, N. Y.
American Social Hygiene Association.	450 Seventh Ave. New York City, N. Y.
Big Brother and Big Sister Federation.	425 Fourth Ave. at 29th St. New York City, N. Y.
Catholic Charities of the Archdiocese of New York.	477 Madison Avenue New York City, N. Y.
Chicago Crime Commission	300 West Adams St. Chicago, Ill.
Child Study Association of America.	54 West 74th St. New York City, N. Y.
Child Welfare League of America	130 East 22nd St. New York City, N. Y.
Commonwealth Fund	41 East 57th St. New York City, N. Y.
Commonwealth Fund, Joint Committee on Methods of Preventing Delinquency.—	50 E. 42nd St. New York City, N. Y.
General Federation of Women's Clubs, Department of Public Welfare	1734 N St., N. W. Washington, D. C.
Illinois Association for Criminal Justice.	Springfield, Ill.
Institute of Social and Religious Research.	230 Park Ave. New York City, N. Y.
Judge Baker Foundation	40 Court St. Scollay Square, Boston, Mass.
Missouri Association for Criminal Justice.	St. Louis. Mo.
Motion Picture Producers and Distributors of America, Inc.	28 W. 44th St. New York City, N. Y.
National Association of Visiting Teachers.	1421 Race St. Philadelphia, Pa.
National Bureau of Casualty and Surety Underwriters.	1 Park Avenue New York City, N. Y.
National Board of Review of Motion Pictures.	70 Fifth Ave. New York City, N. Y.
National Child Labor Committee	331 Fourth Ave. New York City, N. Y.
National Child Welfare Association.	70 Fifth Ave. New York City, N. Y.
National Commission on Law Observance and Enforcement.	Tower Building, 14th and K St., N. W. Washington, D. C.
National Committee for Mental Hygiene, Inc.	450 Seventh Ave. New York City, N. Y.
National Committee on Prisons and Prison Labor.	250 West 57th St. New York City, N. Y.
National Committee on Visiting Teachers.	8 West 40th St. New York City, N. Y.
National Conference of Juvenile Agencies.	House of Refuge Welfare Island, N. Y.
National Conference of Social Work.	82 North High St. Columbus, Ohio.
National Congress of Parents and Teachers.	1201 Sixteenth St., N.W. Washington, D. C.
National Education Association	1201 Sixteenth St., N.W. Washington, D. C.
National Probation Association	450 Seventh Ave. New York City, N. Y.
National Recreation Association	315 Fourth Avenue New York City, N. Y.
New York State Crime Commission.	Albany, N. Y.
Russell Sage Foundation	130 East 22nd St. New York City, N. Y.
Social Science Research Council	230 Park Ave. New York City, N. Y.
U. S. Department of Commerce, Bureau of the Census.	14th St., between E St. and Constitution Ave. N. W. Washington, D. C.
U. S. Department of the Interior, Office of Education.	18th and F Sts., N. W. Washington, D. C.
U. S. Department of Justice, Bureau of Prisons.	Tower Building 14th and K Sts., N. W. Washington, D. C.
U. S. Department of Labor, Children's Bureau.	20th and Constitution Ave., N. W. Washington, D. C.
White House Conference on Child Health and Protection.	Interior Building, Washington, D. C.

PART VII

Selected Bibliography

This bibliography should enable the reader to discover recent and readable material on many aspects of this problem. In an attempt to use only objective data, emphasis is given state and federal reports, studies of actual prison populations, and reports of various crime commissions.

Part I. Statistics on Crime

A. Classes and Definitions

1. CLARK, WILLIAM L., and MARSHALL, WILLIAM L. *A Treatise on the Law of Crimes.* Chicago: Callaghan and Co., 1927. p. 1.
   Includes a definition of crime based on legal decisions.

2. DOW, GROVE SAMUEL. *Crime and Its Prevention.* Ann Arbor, Mich.: Edwards Brothers, 1927. Mimeo. p. 4-6, 84-94.
   Quotes classifications of crimes and criminals given by other writers.

3. LAWES, LEWIS E. *Life and Death in Sing Sing.* Garden City, New York: Doubleday, Doran and Co., 1928. Chapter 1, "Crime—What Is It" p. 1-17; Chapter 2, "The Criminal—Who and Why?" p. 18-28.
   Points out that crime cannot be considered apart from the letter of the law. It is now known that the "born criminal" type does not exist.

4. OWENS, ALBERT ALEXANDER. *The Behavior-Problem Boy.* Philadelphia: University of Pennsylvania, 1929. p. 14-17.
   Quotes definitions illustrating confusion of terminology in discussion of delinquents and behavior problem-cases.

5. PARSONS, PHILIP ARCHIBALD. *Crime and the Criminal.* New York: Alfred A. Knopf, 1926. Chapter 4, "Familiar Classifications of Criminals," p. 48-66.
   Lists classifications of criminals made by Lombroso, Garofalo, and Parmelee, among others.

B. Statistics

1. *Adult Criminals*

6. BAUMES, CALEB H., chairman. *Report of the Crime Commission, 1930.* Legislative Document (1930) No. 98. Albany, New York: J. B. Lyon Co., 1930. 454 p.
   The recommendations cover prisons, prisoners, police, psychiatric practices, procedures, and statistics.

7. JOHNSTON, JAMES A., chairman. *Report of the California Crime Commission, 1931.* Sacramento, California: California State Printing Office, 1931. 142 p.
   Presents findings and recommendations of California Crime Commission relating to crime situation in that state, with legislative proposals.

8. MEAD, BENNET. *Federal Prisoners in Jails, 1929-30.* U. S. Dept. of Justice, Bureau of Prisons. Washington, D. C.: Government Printing Office, 1931. 57 p.
   Covers federal offenders in 1,118 jails and workhouses. Deals with prisoners under sentence of one year or less, and those held in jail before trial. Gives information on offense, geographic distribution, race, nativity, and age. The report also covers prisoners discharged during the year and maintenance costs.

9. MEAD, BENNET. "Police Statistics." *The Annals* 146: 74-95; November, 1929. Philadelphia: American Academy of Political and Social Science.
   Presents statistics on crime rates, from data compiled by police departments.

10. MOLEY, RAYMOND. *The Administration of Criminal Justice in Missouri.* St. Louis, Missouri: Missouri Association for Criminal Justice, 1926. 56 p.
    Summary of Missouri Crime Survey in 1925.

11. POTTER, ELLEN C. "Spectacular Aspects of Crime in Relation to the Crime Wave." *The Annals.* 125: 1-19; May, 1926. Philadelphia: American Academy of Political and Social Science.
    Investigates statistics underlying prevailing conception of a crime wave. During 1875-1926 there appeared a decrease of 37.7 percent in crime throughout the United States, in proportion to population. Article includes data on crime in Pennsylvania.

12. U. S. DEPARTMENT OF COMMERCE, BUREAU OF THE CENSUS. *Prisoners, 1923.* Washington, D. C. Government Printing Office, 1926. 363 p.
    A census of persons on sentence in penal or reformatory institutions January 1, 1923, and those committed to such institutions from January 1 to June 30, 1923. Statistics on prisoners under age eighteen are not included. The report covers 2,341 institutions, 109,075 prisoners serving sentence, and 166,356 commitments.

13. U. S. DEPARTMENT OF COMMERCE, BUREAU OF THE CENSUS. *The Prisoner's Antecedents.* Washington, D. C.: Government Printing Office, 1929. 77 p.
    Gives statistics on previous life of offenders committed in 1923 to state and federal prisons and reformatories.

14. U. S. DEPARTMENT OF COMMERCE, BUREAU OF THE CENSUS. *Prisoners in State and Federal*

Prisons and Reformatories, 1928. Washington, D. C.: Government Printing Office, 1931. 48 p.

Presents statistics on 55,746 prisoners received by ninety-seven prisons and reformatories in 1928.

15. U. S. DEPARTMENT OF JUSTICE, BUREAU OF INVESTIGATION. "Uniform Crime Reports." *Monthly Bulletin* 2: 1-34; May, 1931. Washington, D. C.: Government Printing Office.

Includes data on offenses known May, 1931, to police in 1,197 cities, a number of counties, and possessions of the United States.

16. U. S. DEPARTMENT OF JUSTICE, BUREAU OF PRISONS. *Federal Penal and Correctional Institutions.* Fort Leavenworth, Kansas: U. S. Penitentiary Annex Press, 1930. 90 p.

Annual report for fiscal year ending June 30, 1930.

17. WICKERSHAM, GEORGE W., chairman. *Report on Criminal Statistics.* Report No. 3. National Commission on Law Observance and Enforcement, April 1, 1931. Washington, D. C.: Government Printing Office, 1931. 205 p.

Presents principles underlying criminal statistics, a survey of such statistics in the United States by Sam B. Warner, and a critique of federal criminal statistics by Morris Ploscowe.

2. *Juvenile delinquents*

18. DEARDORFF, NEVA R. "Some Aspects of Juvenile Delinquency." *The Annals* 125: 68-78; May, 1926. Philadelphia: American Academy of Political and Social Science.

Information on extent, nature, and treatment of juvenile delinquency.

19. U. S. DEPARTMENT OF LABOR, CHILDREN'S BUREAU. *Juvenile-Court Statistics, 1930.* Bureau Publication No. 212. Washington, D. C.; Government Printing Office, 1932. 69 p.

Based on information supplied by ninety-two courts cooperating with Children's Bureau in plan for obtaining uniform statistics on delinquency, dependency and neglect cases dealt with by juvenile courts. Statistics published previously for 1927, 1928, and 1929.

20. WICKERSHAM, GEORGE W., chairman. *Report on the Child Offender in the Federal System of Justice.* Report No. 6, National Commission on Law Observance and Enforcement, May 28, 1931. Washington, D. C.: Government Printing Office, 1931. 175 p.

Contains report by Miriam Van Waters on "Problems Presented to the Federal System of Justice by the Child Offender," p. 7-175. Raises the following questions as a guide for its study: What is the volume of cases eighteen years and under appearing in federal district courts annually; what is the geographical distribution? How far distant from home were these children when tried? What offenses are most common? What procedure has been used?

Part II. Crime Costs and School Expenditures

21. APPLETON, ROBERT, chairman. *Criminal Receivers in the United States.* Association of Grand Jurors of New York County, Prison Committee. New York: G. P. Putnam's Sons, 1928. 143 p.

Report of a survey covering the economic loss and conditions surrounding failure to recover stolen goods. Takes up also related legal practices and suggested revisions.

22. LEE, CHARLES A. "Maintenance of Penitentiaries as Burden on Education." *United States Daily.* Washington, D. C., January 29, 1932. p. 10.

Claims that mounting costs of crime suppression decrease funds available for schools.

23. MEAD, BENNET. "Police Statistics." *The Annals* 146:74-95; November, 1929. Philadelphia: American Academy of Political and Social Science.

Presents statistics on police costs, particularly in connection with city police departments. Data given represent those officially compiled by police departments.

24. WICKERSHAM, GEORGE W., chairman. *Report on the Cost of Crime.* Report No. 12, National Commission on Law Observance and Enforcement, June 24, 1931. Washington, D. C.: Government Printing Office, 1931. 657 p.

Following analysis of the cost of crime, considers the cost of administering criminal justice, private expenditures for protection, private losses from criminal acts, losses to state and community, and the total cost of crime.

Part III. Factors Associated with Crime

A. General Discussion[1]

25. BARNES, HARRY ELMER. *Battling the Crime Wave.* Boston: Stratford Co., 1931. 245 p.

A brief, popular summary of essential principles of the new scientific criminology and penology.

26. BEST, HARRY. *Crime and the Criminal Law in the United States.* New York: Macmillan Co., 1930. 615 p.

A consideration of crime and criminal law in their present-day social aspects. Chapter 32, p. 262-70, deals with education in its relation to crime.

27. BREARLEY, H. C. *Homicide in the United States.* Chapel Hill: University of North Carolina Press, 1932. 249 p.

A monograph presenting facts on the extent of homicide in the United States. Suggests explanations of the high rate of homicide in this country. Aims to bring out its social significance.

[1] General discussions of the nature and causes of crime may be found in the following references, cited more fully in other sections of this bibliography: Brasol, Boris. *The Elements of Crime;* Gillin, John Lewis. *Criminology and Penology;* and Kavanagh, Marcus A. *The Criminal and His Allies.*

28. Ettinger, Clayton J. *The Problem of Crime.* New York: Ray Long and Richard R. Smith, 1932. 538 p.

A textbook on criminology covering (1) the criminal, (2) machinery of justice, and (3) society's reaction to crime.

29. Geisert, Henry A. *The Criminal.* St. Louis, Missouri: B. Herder Book Co., 1930. 466 p.

General study of the characteristics, early development, and reformation of the criminal.

30. Haynes, Fred E. *Criminology.* New York: McGraw-Hill Book Co., 1930. 417 p.

Includes chapters relating to the criminal, social control, and prevention of crime and penal institutions.

31. Kuhlman, Augustus Frederick. *A Guide to Material on Crime and Criminal Justice.* Prepared for Social Science Research Council, Committee on Survey of Research on Crime and Criminal Justice, Justin Miller, chairman. New York: H. W. Wilson Co., 1929. 633 p.

A descriptive, classified union catalog of books, monographs, and pamphlets in thirteen selected libraries; and of articles listed in leading periodical indices relating to all phases of crime and criminal justice in the United States.

32. Stearns, Albert Warren. *The Personality of Criminals.* Boston: Beacon Press, 1931. 146 p.

Treats crime as the general problem of the handicapped. Neglected childhood, mental and physical disease, and the primitive culture of immigrants seemed fundamental causes of crime. Recommends more attention to recreation, health, use of leisure, and home surroundings of problem children.

33. Sutherland, Edwin H. *Criminology.* Philadelphia: J. B. Lippincott Co., 1924. 643 p.

A textbook dealing with the whole subject of criminology from the nature and causes of crime, to courts, penal institutions, and preventive aspects.

34. Wickersham, George W., chairman. *Report on the Causes of Crime, Volume I.* Report No. 13. National Commission on Law Observance and Enforcement, June 26, 1931. Washington, D. C.: Government Printing Office, 1931. 390 p.

Among the factors in criminality discussed, includes the morphological, physiological, mental, social, economic, and political.

B. Studies of Individual or Groups of Criminals[1]

35. Gehlke, C. E. and Moley, Raymond. *A Statistical Analysis of the Criminal Cases in the Courts of the State of New York for the Year 1925.* Prepared for Sub-Commission on Statistics, John Knight, chairman. Albany, New York: J. B. Lyon Co., 1927. 80 p.

Analysis of 25,018 arrests on felony charges in New York State, during 1925.

36. Glueck, Sheldon, and Glueck, Eleanor T. *500 Criminal Careers.* New York: Alfred A. Knopf, 1930. 365 p.

A study of the life histories of 510 men released from the Massachusetts Reformatory, whose sentences expired in 1921 and 1922. The histories were studied from the following angles: (1) the history of the youths prior to their sentence; (2) their history while in the institution; (3) their parole history; (4) their post-parole history, covering not only their criminal conduct, but their industrial activities, family life, economic history, use of leisure, habits, and other significant items, over the five-year period following expiration of parole.

37. Lawes, Lewis E. *Twenty Thousand Years in Sing Sing.* New York: Ray Long and Richard R. Smith, 1932. 412 p.

A description of activities at Sing Sing, with accounts of some individual prisoners. The final chapter deals with the problem of the prison as an institution devised by society for punishment and reform.

C. Influence of Specific Factors

1. *Educational status*

38. Brasol, Boris. *The Elements of Crime.* New York: Oxford University Press, 1927. p. 162-64.

From the standpoint of criminology, illiteracy seemed of little significance. However, an illiterate might represent a mentally undeveloped person easily affected by bad environmental influences. Illiteracy might also indicate moral neglect in childhood. However, "the mere fact that a person is unable to read and write does not induce him to become a criminal."

39. Dow, Grove Samuel. *Crime and Its Prevention.* Ann Arbor, Michigan: Edwards Brothers, 1927. Mimeo., p. 47-9.

States that the ratio of illiteracy is higher in prison populations than in the general population.

40. Gillin, John Lewis. *Criminology and Penology.* New York: Century Co., 1926. "Education and Crime," p. 219-27.

States that ignorance and general lack of culture bear directly on the making of criminals.

41. Lawes, Lewis E. *Life and Death in Sing Sing.* Garden City, New York: Doubleday, Doran and Co., 1928. p. 40-1.

Gives data on relation between education and types of crime as shown by statistics of Sing Sing prisoners. On intelligence tests the prisoners as a group showed a slightly higher rating than the draft army of the United States in the late war.

42. Murchison, Carl. *Criminal Intelligence.* Worcester, Massachusetts: Clark University, 1926. Chapter 7, "Literacy," p. 97-111.

[1] See also the following references, cited more fully in other sections of this bibliography: Lawes, Lewis E. *Life and Death in Sing Sing;* Murchison, Carl. *Criminal Intelligence;* and Shaw, Clifford R., and others. *Delinquency Areas.*

A comparison of data for 3,932 white native-born men criminals and 51,620 members of the United States Army. The criminal was found much less literate.

43. PARSONS, PHILIP ARCHIBALD. *Crime and the Criminal.* New York: Alfred A. Knopf, 1926. p. 175-76.

Lack of opportunity to complete an adequate education could not be isolated from other factors in seeking a cause of crime.

44. STUTSMAN, JESSE O. *Curing the Criminal.* New York: Macmillan Co., 1926. p. 168.

No very definite relation could be shown between crime and illiteracy, nor could it be proved that education in letters is in itself sufficient to deter individuals from lawlessness.

2. *Environment*

45. ELLIOTT, JOHN L., and MCCLOSKEY, MARK A. "Environmental Conditions and Crime." *The Annals* 125: 157-61; May, 1926. Philadelphia: American Academy of Political and Social Science.

Includes the statement that "Better schools where attention is given to the specific needs of children, better trained teachers able to cope with simple mental and nervous problems, curricula providing preparation for family life and avocational pursuits, vocational guidance, behavior clinics, decent housing, comprehensive recreational programs to include all ages, playgrounds with able play leaders, mothers properly trained for their function as home-makers—all will contribute to a better community life which would decrease environmental causes of delinquency."

46. POTTER, ELLEN C. "Responsibility of Society for Prevalence of Crime." *United States Daily.* Washington, D. C. October 20, 1931. p. 10.

Present conditions are ascribed to failure of social units, such as the family, to function properly. The modern environment seems to render it impossible for the family to retain its old social values.

47. SHAW, CLIFFORD R., and others. *Delinquency Areas.* Chicago: University of Chicago Press, 1929. 214 p.

Includes data on geographic distribution of 7,541 adult offenders, (age seventeen to seventy-five) placed in Cook County jail during 1920.

3. *Intelligence*

48. MURCHISON, CARL. *Criminal Intelligence.* Worcester, Massachusetts: Clark University, 1926. 291 p.

A study of the backgrounds of criminals in a number of state correctional institutions. Deals with white native-born men criminals, white foreign-born men criminals, negro men criminals, and women criminals. Does not find basis for prevailing opinion that criminality and feeble-mindedness are closely related.

49. ROOT, WILLIAM T., JR., and others. *A Psychological and Educational Survey of 1,916 Prisoners in the Western Penitentiary of Pennsylvania.* Pittsburgh, Pennsylvania. Western Penitentiary, Board of Trustees, (No date). p. 49.

Presents information on mental ages and intelligence quotients of the prisoners by offense, race, and nationality.

4. *Mental defect*

50. DAVIES, STANLEY POWELL. *Social Control of the Mentally Deficient.* New York: Thomas Y. Crowell, 1930. 389 p.

An account of the present status of thought and investigation in the field of mental deficiency.

51. GLUECK, S. SHELDON. *Mental Disorder and the Criminal Law.* Boston: Little, Brown and Co., 1925. 693 p.

Deals with the problem of the criminal insane, their identification and legal status.

52. HEALY, WILLIAM. *Mental Conflicts and Misconduct.* Boston: Little, Brown and Co., 1928. 330 p.

Concludes that study of mental conflicts represents a scientific method of approaching certain problems of misconduct. Includes detailed histories of specific cases.

53. LASHLY, ARTHUR V., operating director. *The Missouri Crime Survey.* New York: Macmillan Co., 1926. Part 10, "Mental Disorder, Crime and the Law," by M. A. Bliss, p. 397-430.

Based on results of three surveys conducted in Missouri, with relation to insane, inmates of certain correctional institutions, and school population in nine representative counties.

5. *Nationality*

54. HARVEY, BEATRICE and SULLENGER, T. EARL. "A Survey of the Cause and Extent of Crime among Foreigners in Omaha." *University of Omaha Bulletin* 1: 4-12; January, 1924.

Based on a study of records for 1922 of the Police Court, Criminal Court, Federal Criminal Court, and Adult Parole Officer in Omaha.

55. KELSEY, CARL. "Immigration and Crime." *The Annals* 125: 165-74; May, 1926. Philadelphia: American Academy of Political and Social Science.

The article summarizes results of various studies of crime among immigrants. Concludes there is no reason to believe that immigrants themselves are contributing unduly to the volume of crime. The crux of the problem seemed to lie in activities of the children of immigrants.

56. WICKERSHAM, GEORGE W., chairman. *Report on Crime and the Foreign Born.* Report No. 10. National Commission on Law Observance and Enforcement, June 24, 1931. Washington, D. C.: Government Printing Office, 1931. 416 p.

Opens with general discussion of crime and the foreign born, presenting some recent statistics and community studies. Points out that statistics have never justified the popularly

supposed relation between immigration and crime.

6. *The Press*[1]

57. BRASOL, BORIS. *The Elements of Crime.* New York: Oxford University Press, 1927. "The Press," p. 165-85.

States that general considerations of the causes and generation of criminality would minimize the influence of the press. The principal danger of perverted publicity seemed to be its ultimate demoralizing effect upon social psychology.

58. MOLEY, RAYMOND. *A Study of the Relation of the Daily Press to Crime and the Administration of Justice.* Sub-Commission on the Causes and Effects of Crime, William Lewis Butcher, chairman. Albany, N. Y.: J. B. Lyon Co., 1927. 25 p.

Considers charges made against newspapers concerning their relation to crime. Illustrates from selected issues. The findings, when taken quantitatively, were inconclusive.

7. *Prohibition laws*

59. AN EX-CRIMINAL. "After Repeal—More Crime, or Less?" *Scribner's* 89: 258-66; March, 1931.

The writer believes that repeal of the Eighteenth Amendment would precipitate an unparalleled orgy of crime.

60. SULLIVAN, EDWARD DEAN. "Racketeers and Crime—After Repeal!" *Redbook* 55: 53-7, 120-22; August, 1930.

Repeal of the Eighteenth Amendment, according to Sullivan, would direct energies of bootleggers into other channels.

61. WICKERSHAM, GEORGE W., chairman. *Report on the Enforcement of the Prohibition Laws of the United States.* National Commission on Law Observance and Enforcement. January 7, 1931, House Document No. 722. Washington, D. C.: Government Printing Office, 1931. 162 p.

Report on benefits and abuses occurring under prohibition laws before and after adoption of the Eighteenth Amendment to the Constitution.

Part IV. The Problem of the Delinquent Child

A. General Discussion[2]

62. BURT, CYRIL. *The Young Delinquent.* New York: D. Appleton and Co., 1925. 619 p.

A study of causes of youthful delinquency and methods of treatment. Limited to children who are subnormal in morality and character.

63. CABOT, FREDERICK P., chairman. *The Delinquent Child.* White House Conference on Child Health and Protection, Committee on Socially Handicapped—Delinquency. New York: Century Company, 1932. 499 p.

A discussion of the delinquent child in his relationships to social and political agencies.

64. VAN WATERS, MIRIAM. *Youth in Conflict.* New York: Republic Publishing Co., 1925. 293 p.

Describes situations of conflict between young people and established social standards. Written from point of view of the social worker, and largely to arouse interest in the problem of delinquent youth.

65. WICKERSHAM, GEORGE W., chairman. *Report on the Causes of Crime, Volume II.* Report No. 13. National Commission on Law Observance and Enforcement, June 26, 1931. Washington, D. C.: Government Printing Office, 1931. 401 p.

Presents results of social research studies in the field of delinquency. Limited to data concerning community, play group, gang, and family.

B. Studies of Individual or Groups of Delinquents[3]

66. BEELEY, ARTHUR L., director. *Boys and Girls in Salt Lake City.* Salt Lake City, Utah: University Press, July, 1929. 220 p.

Aims to determine nature, extent, and desirability of recreational and leisure-time activities of boys and girls age eight to eighteen in Salt Lake City. Data secured by questionnaire sent to 7,500 pupils, some recreational case studies, and observation of recreational activities with which boys and girls come in contact.

67. BURKE, DOROTHY WILLIAMS. *Youth and Crime.* U. S. Department of Labor, Children's Bureau Publication No. 196. Washington, D. C.: Government Printing Office, 1930. 205 p.

Study of prevalence and treatment of delinquency among boys over juvenile-court age in Chicago. Based on records of the police court, jail, and municipal court, from 1915 to 1925. An analysis of a selected group of cases dealt with by the boys' court branch of the municipal court, and detailed studies of eighty-two of the cases form the body of this report.

68. ELMER, M. C. *The Juvenile Delinquent in St. Paul, Minnesota.* St. Paul: Community Chest, 1926. 48 p.

A study of 460 juvenile delinquents in St. Paul, in 1925.

69. MURRAY, VIRGINIA M., chairman. *A Study of Delinquent and Neglected Negro Children before the New York City Children's Court, 1925.* New York: Joint Committee on Negro Child Study in New York City, 1927. 48 p.

[1] See also: Cole, Virginia Lee. *The Newspaper and Crime;* Holmes, Joseph L. "Crime and the Press." *Journal of Criminal Law and Criminology,* May and August, 1929.

[2] See also the following references, cited more fully in the section of this bibliography under Part I: Deardorff, Neva R. "Some Aspects of Juvenile Delinquency;" and Lenroot, Katharine F. *Juvenile Delinquency.*

[3] See also the two following studies prepared by Harry Shulman, and cited in the section on environment, below: *A Study of Delinquency in a District of Kings County,* and *A Study of Environmental Factors in Juvenile Delinquency.*

Deals with four aspects of the problem, as follows: (1) Extent of negro delinquency and neglect; (2) character of offenses for which negro children are brought into court; (3) disposition of negro delinquency and neglect cases; and (4) present facilities for care of delinquent and neglected negro children.

70. SHAW, CLIFFORD R. *The Jack-Roller.* Chicago: University of Chicago Press, 1930. 205 p.

One of a series of studies of repeated male offenders under age seventeen on parole from correctional institutions. Published to illustrate the use of "own story" material in the study and treatment of the delinquent child.

71. SHAW, CLIFFORD R., and MOORE, MAURICE E. *The Natural History of a Delinquent Career.* Chicago: University of Chicago Press, 1930. 280 p.

The second volume in a series of case studies, following publication of *The Jack-Roller.* Represents the history of a young male recidivist sentenced to a state penal institution a few months prior to his seventeenth birthday, after being implicated in a series of crimes of violence.

72. SHULMAN, HARRY M. *From Truancy to Crime —A Study of 251 Adolescents.* Sub-Commission on Causes and Effects of Crime, William Lewis Butcher, chairman. Albany, New York: J. B. Lyon Company, 1928. 139 p. See p. 437-575, Report of New York State Crime Commission for 1928.

A study of 251 boys in the Borough of Manhattan who were released from the Truant School. Covers history following release, and aspects of their remote childhood.

73. SHULMAN, HARRY M. *A Study of Delinquency in Two Rural Counties.* Sub-Commission on Causes and Effects of Crime, William Lewis Butcher, chairman. Albany, New York: J. B. Lyon Co., 1927. 48 p.

A study of state and county penal admissions in two counties of western New York.

74. SHULMAN, HARRY M. *A Study of Problem Boys and Their Brothers.* Sub-Commission on Causes and Effects of Crime, William Lewis Butcher, chairman. Albany, New York: J. B. Lyon Co., 1929. 408 p. See p. 195-602, Report of New York State Crime Commission for 1929.

From cases coming to children's court of New York County in 1927, forty pairs of brothers were selected for study, in each case one of the brothers representing a non-delinquent. The data were considered from the following standpoints: chronological data, general conduct, intelligence, temperament, physical condition, character, associates, interests, school and vocational history, home and family.

75. SLAWSON, JOHN. *The Delinquent Boy.* Boston: Richard G. Badger, 1926. 477 p.

Presents data on approximately half the inmates of four institutions for delinquent boys in New York State.

76. SULLENGER, THOMAS EARL. *Social Determinants in Juvenile Delinquency.* Omaha, Nebr.: Douglas Printing Co., 1930. 87 p.

An analysis of 1,145 juvenile delinquents appearing before Juvenile and Domestic Relations Division of the Omaha District Court during 1922-27. Comparisons made with study for same length of time of seventy-five cases in Columbia, Missouri.

C. Influence of Specific Factors

1. *Child labor*[1]

77. LEWIS, CLARE L. "Child Workers in an Unemployment Period." *American Child* 13: 1, 5; January, 1931. New York: National Child Labor Committee, 331 Fourth Avenue.

Points out that current unemployment conditions among adults have forcibly demonstrated that the younger and more untrained the applicant, the fewer his opportunities for securing worthwhile employment.

78. "They Belong in School." *American Child* 13: 1, 4; September, 1931. New York: National Child Labor Committee, 331 Fourth Avenue.

Presents results of study during 1931 by National Child Labor Committee on return of unemployed children to school. Forty-six cities in twenty-one states reported unemployed children brought back into school system on basis approximating full-time attendance.

2. *Environment*

79. BOOTHE, VIVA B. "Criminality and the Home." *The Annals* 125: 192-200; May, 1926. Philadelphia: American Academy of Political and Social Science.

States there is some evidence to indicate that present organization in many homes is not conducive to development of satisfactory standards of conduct and that lack of supervision in the home is partly responsible for a large share of juvenile delinquency and even misconduct in adult life.

80. SHAW, CLIFFORD R., and others. *Delinquency Areas.* Chicago: University of Chicago Press, 1929. 214 p.

Found that rates of truancy, delinquency, and crime reflected differences in community backgrounds. High rates occurred in areas characterized by physical deterioration and declining population. Rates also varied inversely in proportion to distance from center of the city.

81. SHULMAN, HARRY M. *A Study of Delinquency in a District of Kings County.* Sub-Commission on Causes and Effects of Crime, William Lewis Butcher, chairman. Albany, New York: J. B. Lyon Co., 1927. 57 p.

An analysis of certain environmental factors in juvenile delinquency, initiated by city life. Selection of precinct based on police department records of arrests of juvenile delin-

[1] See also: Van Waters, Miriam. *Youth in Conflict,* cited in other sections of this bibliography. Chapter 4, p. 111-23, deals with "Conflict in Industry."

quents in all precincts in Brooklyn during 1925. Special reference made to factors of housing, spare-time activities, commercial recreation, and gang life.

82. SHULMAN, HARRY M. *A Study of Environmental Factors in Juvenile Delinquency.* Sub-Commission on Causes and Effects of Crime, William Lewis Butcher, chairman. Albany, New York: J. B. Lyon Co., 1928. 93 p. See p. 577-699, Report of New York State Crime Commission for 1928.

Survey of types and extent of juvenile delinquency in a portion of District No. 1 of Manhattan Children's Court, New York City. The study, made in 1926, dealt with 819 boys and 107 girls who came to attention of public and private agencies.

3. *Intelligence*

83. LASHLY, ARTHUR V., operating director. *The Missouri Crime Survey.* New York: Macmillan Co., 1926. Part 10, "Mental Disorder, Crime and the Law," by M. A. Bliss, p. 397-430.

A study of 381 out of 417 juvenile delinquents in St. Louis, giving information on mental age. The middle 50 percent had intelligence quotients between 65 and 89; 90 percent had intelligence quotients below 100.

4. *Mental defects*

84. GRIMBERG, L. *Emotion and Delinquency.* New York: Brentano's, 1928. 147 p.

A clinical study of five-hundred delinquents, to determine whether mental defectiveness is a cause of delinquency.

85. LASHLY, ARTHUR V., director. *The Illinois Crime Survey.* Chicago: Illinois Association for Criminal Justice, 1929. 1108 p.

Chapter 15, by H. Douglas Singer, p. 737-810, deals with "The Deranged and Defective Delinquent."

86. WALLIN, J. E. WALLACE. "Feeble-mindedness and Delinquency." *Mental Hygiene* 1: 585-90; October, 1917. New York: National Committee for Mental Hygiene, 450 Seventh Avenue.

Survey of conservative literature on relation of feeble-mindedness to delinquency revealed estimates of proportion of feeble-minded persons among delinquent groups falling below 25 or 30 percent.

5. *Motion pictures*

87. ADDAMS, JANE. *The Spirit of Youth and the City Streets.* New York: Macmillan Co., 1909. Chapter 4, "The House of Dreams," p. 75-103.

Discusses attraction of and at times undesirable influence of movies on young people.

88. MITCHELL, ALICE MILLER. *Children and Movies.* Chicago: University of Chicago Press, 1929. 181 p.

Based on a study of the movie experience of 10,052 Chicago children, representing three groups: average public-school children, juvenile delinquents, boy and girl scouts. Delinquent children's contact with movies exceeded that of the other children.

89. PERRY, CLARENCE ARTHUR. *The Attitude of High-School Students toward Motion Pictures.* New York: National Board of Review of Motion Pictures, 70 Fifth Avenue, 1923. 55 p.

Presents data from 1922 questionnaire study involving 37,505 high-school students. Preferences as to screen performers and photoplays seemed intelligent and wholesome, in general. The educational film did not realize its possibilities.

90. THOMAS, AUGUSTUS O., chairman. *The Neighborhood and Its Motion Pictures.* Committee on Children's Pictures. New York: Motion Picture Producers and Distributors of America, 28 W. 44th St., 1930. 109 p.

Manual for community worker interested in best motion pictures for the family.

D. Early Indications of Delinquency

91. MORGAN, JOHN J. B. *The Psychology of the Unadjusted School Child.* New York: Macmillan Co., 1926. 300 p.

To develop character in a pupil requires, in addition to the proper attitude on teacher's part, a knowledge of mechanism concerned in trait development, deviations liable to occur, signs of such deviations, their causes, and proper remedial measures.

92. NORTON, PARKER LAVELLA. *Early Indications of Delinquency in Problem Boys.* Master's thesis, Seattle, Wash.: University of Washington, 1926. 153 p. ms.

Analyzes problem boy situation in Seattle public schools, by tracing, through interviews with 228 teachers, school histories of fifty boys in local Boys' Parental School. Also presents data from teachers in twelve Seattle grade schools on questionnaire concerning problem traits.

93. RAUBENHEIMER, ALBERT SYDNEY. *An Experimental Study of Some Behavior Traits of the Potentially Delinquent Boy.* Psychological Monograph: Vol. 34, No. 6. Princeton, New Jersey: Psychological Review Co., 1925. 107 p.

Attempts to devise method of analysis whereby certain delinquent tendencies in boys may be determined prior to their crystallization in permanent habits of thought and action.

E. Extent of Behavior Difficulties among School Children

94. BERRY, CHARLES SCOTT, chairman. *Special Education: the Handicapped and the Gifted.* White House Conference on Child Health and Protection, Committee on Special Classes. New York: Century Co., 1931. p. 6.

States that in the United States a total of 675,000 children, or at least 3 percent of the elementary school enrolment, present behavior problems.

95. PAYNTER, RICHARD H., and BLANCHARD, PHYLLIS. *A Study of Educational Achievement of Problem Children.* New York: Commonwealth Fund, Division of Publications, 1929. 72 p.

A group of 167 children were examined in Los Angeles, 87.4 percent showing behavior difficulties; 163 examined in Philadelphia showed behavior problems in 84 percent of the cases.

F. Types of Behavior Difficulties

96. ACKERSON, LUTON. *Children's Behavior Problems.* Chicago: University of Chicago Press, 1931. 268 p.

A statistical study of 5,000 children examined consecutively at Illinois Institute for Juvenile Research. Takes up relation of children's behavior problems to age and intelligence, as shown in group of 4,952 white children. Individual study was made of 154 frequently appearing personality and conduct problems.

97. BRUECKNER, LEO J., and MELBY, ERNEST O. *Diagnostic and Remedial Teaching.* Boston: Houghton Mifflin Co., 1931. Chapter 1, "Evidences and Causes of Maladjustment in our Schools," p. 1-16.

Statistics on age-grade progress and nonpromotion seemed to indicate serious maladjustments in schools. Factors contributing to maladjustments classified as mental, physical, pedagogical, emotional, volitional, social, and moral.

98. MARTENS, ELISE H. *An Annotated Bibliography on the Education and Psychology of Exceptional Children.* U. S. Department of the Interior, Office of Education. Pamphlet No. 23. July, 1931. Washington, D. C.: Government Printing Office, 1931. p. 7-18.

A list of references on behavior problems and juvenile delinquents. Covers general principles, clinical procedures, case studies, related surveys, and research.

99. NATIONAL COMMITTEE FOR MENTAL HYGIENE. *Behavior Problems of School Children.* New York: the Committee, 450 Seventh Avenue, 1931. 20 p.

The four sections of the pamphlet deal respectively with the nervous child, the truant, the bad boy, and the retarded child.

100. NATIONAL EDUCATION ASSOCIATION AND NATIONAL CONFERENCE OF SOCIAL WORK, COOPERATING COMMITTEES ON BEHAVIOR PROBLEMS OF CHILDREN. *Report as Adopted in Joint Session at Cleveland, Ohio, May 27, 1926.* Washington, D. C.: National Education Association, July, 1926. 15 p.

Deals with three topics: (1 children who present behavior problems; (2) objectives of cooperating committees on behavior problems of children; (3) means of attaining these objectives.

101. OWENS, ALBERT ALEXANDER. *The Behavior-Problem Boy.* Philadelphia: University of Pennsylvania, 1929. 188 p.

Study of behavior-problem boy, with respect to factors surrounding his development, post-school career, and effectiveness of disciplinary school in treating him.

102. SAYLES, MARY BUELL. *The Problem Child at Home.* New York: Commonwealth Fund, Division of Publications, 1928. 342 p.

Discusses most typical and frequently occurring problems of parent-child relationships. Based on records from clinics conducted during five-year period under Commonwealth Program for the Prevention of Delinquency.

103. SAYLES, MARY B. *The Problem Child in School.* New York: Joint Committee on Methods of Preventing Delinquency, 1925. 288 p.

Illustrates common types of problems among school children which might lead to serious permanent maladjustment. Indicates methods used by visiting teachers in helping such children.

104. TIMME, ARTHUR R. "The Role of Physical Conditions in Behavior Problems." *Mental Hygiene* 15: 468-79; July, 1931. New York: National Committee for Mental Hygiene, 450 Seventh Avenue.

According to the writer, rational treatment of behavior problems must recognize influence of physical conditions and their social implications. However, influence of physical conditions is apparent when individual studied as a unit, from physical, intellectual, emotional, and social standpoints.

G. Educational Facilities for Delinquents

1. *Special schools*

105. CLEVELAND CITY SCHOOL DISTRICT, SUPERINTENDENT. *Thomas A. Edison School.* Report to Board of Education, 1929-30. Cleveland: Public Schools, 1930. 16 p.

The Thomas A. Edison School for Boys, teaches the boys who are educationally maladjusted elsewhere.

106. HECK, ARCH O. *Special Schools and Classes in Cities of 10,000 Population and More in the United States.* Bulletin, 1930, No. 7. U. S. Department of the Interior, Office of Education. Washington, D. C.: Government Printing Office, 1930. p. 3-6.

Presents data on cities having parental schools, disciplinary schools, and classes for truants and delinquents.

2. *Special classes*

107. KUNZIG, ROBERT W. *Public School Education of Atypical Children.* Bulletin, 1931, No. 10. U. S. Department of the Interior, Office of Education. Washington, D. C.: Government Printing Office, 1931. 160 p.

An analysis of educational opportunities provided atypical (including disciplinary) children in large cities, and unit costs of this education. Part I covers thirty states having cities of over 100,000 population; Part II, sixty-eight cities of over 100,000 population.

108. MARTENS ELISE H. *Biennial Survey of Education in the United States, 1928-1930.* (Advance pages, Vol. 1) U. S. Department of the Interior, Office of Education, Bulletin, 1931, No. 20. Washington, D. C.: Government Printing Office, 1931. Chapter 11, "Education of Exceptional Children," 38 p.

Considers state, city, and county provisions for education of exceptional children, preparation of teachers, and mental hygiene facilities.

3. *Behavior clinics*[1]

109. BROWN, SANGER, and POTTER, HOWARD W. *The Psychiatric Study of Problem Children.* Utica, New York: New York State Department of Mental Hygiene, 1930. 152 p.

Prepared for use of child guidance clinics and institutions handling problem children. An attempt to present a general outline of methods of examination approved by qualified workers in the field.

110. HILDRETH, GERTRUDE H. *Psychological Service for School Problems.* Yonkers-on-Hudson, New York: World Book Co., 1930. 317 p.

Describes implications of psychological service for educational institutions, progressive movements in education creating need for this service, and actual work of administering psychological service in schools.

111. STEVENSON, GEORGE S., and BASSETT, CLARA. *Directory of Psychiatric Clinics for Children in the United States.* New York: Commonwealth Fund, Division of Publications, 1928. 181 p.

Includes only clinics providing regular service to public for study and treatment of children's behavior problems, and having psychiatrists regularly on the staff.

112. TRUITT, RALPH P., and others. *The Child Guidance Clinic and the Community.* New York: Commonwealth Fund, Division of Publications, 1928. 106 p.

A group of papers covering function and relationships of clinic as part of the organized social effort of the community. On p. 64-82 William L. Connor discusses "The Child Guidance Clinic and the Public Schools."

113. U. S. DEPARTMENT OF LABOR, CHILDREN'S BUREAU. *List of Psychiatric Clinics for Children in the United States.* Publication No. 191. Washington, D. C.: Government Printing Office, 1929. 28 p.

List of clinics established up to April 1, 1928.

4. *Visiting teacher*

114. CULBERT, JANE F. *The Visiting Teacher at Work.* New York: Commonwealth Fund, Division of Publications, 1929. 235 p.

A discussion of professional standards, procedure, and administrative relationships of the visiting teacher. Based on experience of visiting teachers in thirty communities.

115. ELLIS, MABEL BROWN. *The Visiting Teacher in Rochester.* New York: Joint Committee on Methods of Preventing Delinquency, 1925. 205 p.

Study of visiting teacher from viewpoint of social worker. Describes organization and development of visiting teacher work in Rochester, New York. On p. 128-31 gives results of study of seven cases of truancy treated by court representative in Rochester, 1923-24.

5. *Teacher training*

116. BENSON, CHARLES E., and ALTENEDER, LOUISE E. "Mental Hygiene in Teacher-Training Institutions in the United States: A Survey." *Mental Hygiene* 15: 225-41; April, 1931. New York: National Committee for Mental Hygiene, 450 Seventh Avenue.

Reports results of questionnaire circulated in January, 1930, to determine the training now provided teachers in principles and practice of mental hygiene. Marked progress appeared since 1919-20 when similar survey was made.

117. NATIONAL EDUCATION ASSOCIATION, COMMITTEE ON BEHAVIOR PROBLEMS. *The Preparation of Teachers for Dealing with Behavior-Problem Children.* Report presented at Minneapolis, July, 1928. Washington, D. C.: the Association, 1928. 11 p.

A discussion of present training facilities and minimum essentials in preparation for teachers of behavior-problem children.

6. *Treatment and care of delinquents*

118. ADDAMS, JANE, and others. *The Child, the Clinic, and the Court.* New York: New Republic, 1925. 344 p.

A group of twenty-seven papers covering, in Part I, "The Personality of the Child"; in Part II, "The Clinic and a Symposium on Fundamental Behavior"; in Part III, "The Court."

119. ADDITION, HENRIETTA. *City Planning for Girls.* Chicago, Illinois: University of Chicago Press, 1928. 150 p.

A study of social machinery available for case work with girls in Philadelphia. Comments on present methods, brief histories of past experiments and recommendations for future activities in this line.

120. BOND, EARL D., and APPEL, KENNETH E. *The Treatment of Behavior Disorders Following Encephalitis.* New York: Commonwealth Fund, Division of Publications, 1931. 163 p.

Describes hospital treatment given forty-eight children whose behavior had been effected by encephalitis. Brings out occurrence and treatment of behavior disorders following mild injuries to the brain.

[1] For further material on child guidance clinics see the following reference, cited more fully in other sections of this bibliography: Thomas, William I., and Thomas, Dorothy Swaine. *The Child in America.* A more recent directory of psychiatric clinics than that cited above is being prepared by the Commonwealth Fund.

121. Brown, L. Guy. "The Problems in Juvenile Delinquency and Dependency." *Proceedings, 1930.* Louisville, Kentucky: National Conference of Juvenile Agencies, 1930. p. 53-77.

Among other problems takes up that of evaluating present methods of handling cases, training and qualifications of workers, and preventive measures.

122. Dobbs, Harrison A. "Institutional Care for Delinquent Children: A New Appraisal" *The Annals* 151: 173-79; September, 1930. Philadelphia: American Academy of Political and Social Science.

Points out increasing attention given delinquent children, with accompanying specialization of institutions for their care.

123. Elliott, Mabel Agnes. *Correctional Education and the Delinquent Girl.* Harrisburg, Pennsylvania: Commonwealth of Pennsylvania, Department of Welfare, No date. 112 p.

An attempt to test objectively program and methods of modern reformatory training. Based on follow-up study of 110 girls committed to Sleighton Farm, at Darlington, Pennsylvania, during 1913, 1914, and 1915.

124. Healy, William, and Bronner, Augusta F. *Delinquents and Criminals.* New York: Macmillan Co., 1926. 317 p.

An attempt to estimate effectiveness of treatment upon certain offenders. Based on case studies and follow-up work of repeated juvenile offenders in Chicago and Boston.

125. Healy, William, and Bronner, Augusta F. "Juvenile Detention Homes." *The Annals* 151: 180-83; September, 1930. Philadelphia: American Academy of Political and Social Science.

Deals with administrative advantages of detention and the disadvantages accruing to individuals therefrom. Concludes detention of juveniles very frequently inimical to interests of society and fundamental intentions of good juvenile court procedure.

126. Healy, William, Bronner, Augusta F., Baylor, Edith M. H., and Murphy, J. Prentice. *Reconstructing Behavior in Youth.* New York: Alfred A. Knopf, 1929. 325 p.

Study of 501 problem children placed in foster homes and studied over an eight-year period.

127. Johnson, Kate Burr, chairman. *Organization for the Care of Handicapped Children.* White House Conference on Child Health and Protection, Committee on National, State, and Local Organization for the Handicapped. New York: Century Co., 1932. 365 p.

A study of public and private provisions made for the handicapped, including the delinquent child. Services developed for the delinquent children include the juvenile court, visiting teacher service, and child study clinic.

128. King, Anna Elizabeth. *Changing the Delinquent Attitude.* Cleveland, Ohio: Western Reserve University, School of Applied Social Sciences and Catholic Collegiate Association, 1927. 80 p.

Describes methods and agencies operating in successful adjustment of delinquent girls. Based on records of forty-four girls, an intensive study being made in fifteen cases.

129. Reeves, Margaret. *Training Schools for Delinquent Girls.* New York: Russell Sage Foundation, 1929. 455 p.

A study of fifty-seven training schools for girls, undertaken for Department of Child Helping of Russell Sage Foundation. Aims in part to ascertain tendencies and develop standards. Information obtained through personal visits to institutions.

Part V. The Social Agencies of Crime Prevention

A. General Discussion

130. Doll, Edgar W. "The Control of Crime." *Scientific Monthly* 26: 551-56; June, 1928.

Discusses seven methods of approach to study of crime prevention: (1) statistics; (2) predisposing conditions; (3) opportunity for crime; (4) criminal law; (5) law enforcement; (6) punishment and correction; and (7) rehabilitation of offenders.

131. King, Clyde L., editor. "Modern Crime: Its Prevention and Punishment." *The Annals* 125: 1-286; May, 1926. Philadelphia: American Academy of Political and Social Science.

The four parts of this issue cover (1) modern tendencies in crime; (2) judicial procedure and modern crime; (3) prevention of modern crime; and (4) punishment of modern crime as a means of crime prevention.

132. Smith, Barry C., chairman. *Commonwealth Program for the Prevention of Delinquency: Progress Report.* Publication No. 8. New York: Joint Committee on Methods of Preventing Delinquency, 1925. 47 p.

Describes activities in promoting community services for understanding and guidance of behavior-problem children. The program aimed to demonstrate methods of psychiatric clinics and visiting teachers, and to enlarge training facilities for workers in these fields.

133. Van Waters, Miriam. *Youth in Conflict.* New York: Republic Publishing Co., 1925. Chapter 12. "A Community Program," p. 257-80.

Outlines a community program for adjustment of delinquents.

134. Vollmer, August. "The Prevention and Detection of Crime as Viewed by a Police Officer." *The Annals* 125: 148-53; May, 1926. Philadelphia: American Academy of Political and Social Science.

Urges further cooperation of public, press, and pulpit with police representatives.

B. Economic Welfare

135. BONGER, WILLIAM ADRIAN. *Criminality and Economic Conditions.* (Translated by Henry P. Horton.) Boston: Little, Brown and Co., 1916. 706 p.

Reviews literature available on relation between economic conditions and criminality, and discusses the possible consequences of the present economic system.

136. KELSO, ROBERT W. "Character Last." *Survey* 66: 303-04; June 15, 1931.

According to the writer, social consequences of current economic conditions fall most heavily on children.

137. LEWISOHN, ADOLPH. "Some Factors in Crime Prevention." *The Annals* 125: 135-37; May, 1926. Philadelphia: American Academy of Political and Social Science.

As factors indirectly contributing to the decrease of crime, suggests the extension of education among children and general public; better housing conditions, reasonable hours of work, facilities for rest, recreation, and wholesome amusement for the masses; elimination of unemployment; and improvement of conditions among persons finding it difficult to secure an adequate income.

C. Public Health Activities

1. *Housing*

138. FORD, JAMES. "Improved Housing as a Means of Crime Prevention." *The Annals* 125: 177-80; May, 1926. Philadelphia: American Academy of Political and Social Science.

There seemed to be a relation between housing and conduct, despite difficulty of separating effect of bad housing from other factors. Bad housing may reduce physical health, and resistance to temptation; it may be directly conducive to moral contamination, and may lead members of the family to spend their leisure away from home.

2. *Recreational facilities*

139. MURRAY, VIRGINIA M., chairman. *A Study of Delinquent and Neglected Negro Children before the New York City Children's Court, 1925.* New York: Joint Committee on Negro Child Study in New York City, 1927. p. 7-8.

Among other items, the committee recommended development of an all-year-round recreational program and further social case work.

140. TRUXAL, ANDREW G. *Outdoor Recreation Legislation and Its Effectiveness.* New York: Columbia University Press, 1929. 218 p.

A summary of American legislation for public outdoor recreation, 1915-1927, together with a study of the association between recreation areas and juvenile delinquency in Manhattan during 1920.

141. WYNNE, SAMUEL O. "Recreation Centers as a Means of Crime Prevention." *The Annals* 125: 175-76; May, 1926. Philadelphia: American Academy of Political and Social Science.

Recommends turning schools into recreation centers and directing efforts toward moral improvement of boys.

3. *Control of defectives*[1]

142. GODWIN, GEORGE. *Cain or the Future of Crime.* New York: E. P. Dutton and Co., 1929. 108 p.

As bad heredity and bad environment appeared to be causes of crime, the remedy would seem to require elimination of degenerate human stock, sterilization of waste human material, and improvement of environment.

143. POPENOE, PAUL. "Sterilization and Criminality." *Report of the Fifty-first Annual Meeting of American Bar Association.* Baltimore: Lord Baltimore Press, 1928. p. 575-81.

With reference to legal provisions in California for sterilization of certain criminal groups, brings out need for adequate evidence concerning ultimate results of this practice. Would have it made clear whether sterilization of criminals was for punitive, therapeutic, or eugenic reasons.

D. The Agencies of Justice

1. *Criminal law*

144. CLARK, WILLIAM L., and MARSHALL, WILLIAM L. *A Treatise on the Law of Crimes.* Chicago: Callaghan and Co., 1927. 794 p.

Aims to present general principles of common law in relation to crimes, and to show extent to which they have been modified by statute. Covers principal statutory crimes at length, citing from selected cases.

145. STRAWN, SILAS H. "Fifty Years' Progress in Law." *Report of the Fifty-First Annual Meeting of American Bar Association.* Baltimore: Lord Baltimore Press, 1928. p. 171-91.

Shows changes in substantive law in respect to crime, legal education, and other topics.

2. *Court procedure*[2]

146. CALLENDER, CLARENCE N. *American Courts.* New York: McGraw-Hill Book Co., 1927. 284 p.

Describes court organization in state and federal jurisdictions, and explains procedure for various types of litigation. Chapter 15, p. 216-36, deals with "The Problem of Improving Legal Procedure."

147. JOHNSTONE, ALAN JR., "Suggestions for Reform in Criminal Procedure." *The Annals* 125: 94-6; May, 1926. Philadelphia: American Academy of Political and Social Science.

[1] See also the following reference cited under "Mental defect," in Part III of this bibliography: Davies, Stanley Powell. *Social Control of the Mentally Deficient.*

[2] See also the following reference, cited fully in other sections of this bibliography: Kavanagh, Marcus A. *The Criminal and His Allies.*

Suggests certain changes in criminal procedure. Recommends restatement of law and procedure of arrest; establishment of the right of state to formally interrogate the accused; abolition of inferior criminal court; and establishment of consolidated criminal court, as opposed to multiple hearing of cases.

148. LEWIS, EDWIN O. "The Prevention and Punishment of Modern Crime." *The Annals* 125: 119-25; May, 1926. Philadelphia: American Academy of Political and Social Science.

Among reasons suggested for failure in the administration of criminal justice are: technical rules of law and procedure; too much control by lawyers of these rules and the courts; poor jury material; delay in bringing accused to trial; influence of politics upon police and judicial administration.

149. MOLEY, RAYMOND. *Our Criminal Courts.* New York: Minton, Balch and Co., 1930. 271 p.

Deals with administration of criminal courts, discussing "Preliminaries to Trial," "The Long Day in Court," and "The Public's Interests vs. the Public Interest." In Chapter 8, "The Riddle of Insanity," points out that to ascribe practically all crime to mental defectiveness and substitute mental therapy for legal processes would put undue burden on psychiatrist.

150. MOLEY, RAYMOND. *Politics and Criminal Prosecution.* New York: Minton, Balch and Co., 1929. 241 p.

Presents evidence of political factors entering into criminal law administration in the United States, particularly as they affect the prosecutor.

151. POUND, ROSCOE. *Criminal Justice in America.* New York: Henry Holt and Co., 1930. 226 p.

Discusses role and background of present criminal justice as organized in the United States. Improvement is considered from standpoint of aims and agencies.

152. WICKERSHAM, GEORGE W., chairman. *Report on Criminal Procedure.* Report No. 8, National Commission on Law Observance and Enforcement, June 9, 1931. Washington, D. C.: Government Printing Office, 1931. 51 p.

A review of criminal procedure in the United States, on the basis that satisfactory procedure is important to maintain public faith in criminal justice. Deals with petty offenses, procedural protection of the accused, criminal pleading, criminal evidence, conduct of trials and conviction.

153. WICKERSHAM, GEORGE W., chairman. *Report on Prosecution.* Report No. 4, National Commission on Law Observance and Enforcement, April 22, 1931. Washington, D. C.: Government Printing Office, 1931. 337 p.

Presents a study of public prosecutor, public defender, and grand jury. Emphasizes importance of individualization in treatment of offenders, and interrelation of all parts of administration of justice. The volume contains analysis of criminal justice surveys relating to prosecution and courts, and bibliography on prosecution.

3. *Law enforcement*

154. WICKERSHAM, GEORGE W., chairman. *Report on Lawlessness in Law Enforcement.* Report No. 11. National Commission on Law Observance and Enforcement, June 25, 1931. Washington, D. C.: Government Printing Office, 1931. 347 p.

Presents report dealing with abuses of power in administration of criminal justice. Covers third degree and unfair procedures in prosecution.

155. WICKERSHAM, GEORGE W., chairman. *Report on Police.* Report No. 14, National Commission on Law Observance and Enforcement, June 26, 1931. Washington, D. C.: Government Printing Office, 1931. 140 p.

This report aims to present the causes of defects in police administration. Includes a study of "Police Conditions in the United States," p. 11-40.

4. *Improved prison conditions*

156. AMERICAN PRISON ASSOCIATION. *The Declaration of Principles of the 1870 Congress Revised and Reaffirmed.* New York: the Association, 135 E. 15th St., 1930. 11 p.

A revision of thirty-seven principles on treatment of criminals.

157. CASS, E. R. "American Prisons Today: A Survey." *The Annals* 157: 6-12; September, 1931. Philadelphia: American Academy of Political and Social Science.

Outlines types of penal institutions and gives a description of typical prison life. Claims that public indifference and neglect is largely responsible for lack of worthwhile progress in development and improvement of our penal and correctional system.

158. RECTOR, FRANK L. *Health and Medical Service in American Prisons and Reformatories.* New York: National Society of Penal Information, Inc., 1929. 282 p.

Survey of organization and functioning of health and hospital service in American prisons. Found few prisons with hospital facilities adequate for needed corrective medical and surgical work.

159. SELLIN, THORSTEN and YOUNG, DONALD, editors. "Prisons of Tomorrow." *The Annals* 157: 1-262; September, 1931. Philadelphia: American Academy of Political and Social Science.

Presents articles on the American prison and prisons abroad.

160. WICKERSHAM, GEORGE W., chairman. *Report on Penal Institutions, Probation, and Parole.* Report No. 9, National Commission on Law Observance and Enforcement, June 23, 1931. Washington, D. C.: Government Printing Office, 1931. 344 p.

An inquiry into methods of penal treatment, covering imprisonment, probation, and parole. Concludes that incarceration is a formless, automatic procedure, without regard to individuals. Neither probation nor parole appeared to be properly or adequately developed in this country.

5. *Probation and parole*

161. COCHRAN, HERBERT G. "Probation, Its Uses and Potentialities." *Yearbook, 1929.* New York: National Probation Association, 1929. p. 12-17.

Considers probation greatest forward step in criminal justice occuring for a century. States that while it costs $15 to $18 a year per person to supervise a person on probation, it costs $350 to $500 a year to maintain a person in prison, not counting economic loss to family and community.

162. COOLEY, EDWIN J. *New Goals in Probation.* Albany, New York: State Probation Commission, 1926. 71 p.

Describes experiment in well-organized, "standard" probation work, as conducted by Catholic Charities Probation Bureau in Court of General Sessions, New York City. This "model" court over period of twenty months investigated the cases of 2,976 offenders, placing 19 percent of these on probation.

163. JOHNSON, FRED R. *Probation for Juveniles and Adults.* New York: Century Co., 1928. 242 p.

Concerns history, present status, principles and methods of probation.

164. VOLD, GEORGE B. *Prediction Methods and Parole.* Hanover, N. H.: Sociological Press, 1931. 138 p.

A study of factors involved in violation or non-violation of parole. Based on records of 1,192 men paroled during five-year period from two adult male penal institutions in Minnesota.

6. *Juvenile court*

165. LOU, HERBERT H. *Juvenile Courts in the United States.* Chapel Hill, North Carolina: University of North Carolina Press, 1927. 277 p.

Presents a critical account of more important aspects of juvenile court, including philosophical, legal, historical, diagnostic, procedural, administrative, and sociological. Explains its principles, development, present status, forms of organization, actual operation, and significant tendencies.

166. NATIONAL PROBATION ASSOCIATION, COMMITTEE ON STANDARD JUVENILE COURT LAWS. *A Standard Juvenile Court Law.* (Revised edition.) New York: the Association, 450 Seventh Avenue, 1928. 32 p.

The committee aimed to prepare an act that could be recommended for adoption in all states, with modifications to fit local needs. Conforms, in general, to "Juvenile Court Standards," formulated in 1923 by committee appointed by Children's Bureau.

7. *Educational programs of prisons and reformatories*

167. CANTOR, NATHANIEL F. "The Prisoner and the Law." *The Annals* 157: 23-32; September, 1931. Philadelphia: American Academy of Political and Social Science.

On p. 28-9 discusses educational facilities provided by American prisons. States that less than 20 percent of the prison population in the United States is enrolled in any school. Provision is rarely made for sound program of education, for trained personnel, or for equipment.

168. MACCORMICK, AUSTIN H. "Education in the Prisons of Tomorrow." *The Annals* 157: 72-7; September, 1931. Philadelphia: American Academy of Political and Social Science.

States that in future, prisoners will be looked upon not only as criminals in need of reform but as adults in need of education. Types of education offered will include fundamental academic, vocational, health, cultural, and social instruction. Intelligence tests indicate that prisoners do not differ greatly from the adult population. Conservative estimates show that adult prisoners as a group lack education of all types.

169. MACCORMICK, AUSTIN H. *The Education of Adult Prisoners.* New York: National Society of Penal Information, 114 East 30th Street, 1931. 456 p.

A study of educational and library facilities in American prisons and reformatories for adults, with emphasis on prisons. Based on visits to the institutions, involving about 110 institutions of major importance. Attempts to formulate a workable educational program.

E. Religion

170. DUNN, C. V. "The Church and Crime in the United States." *The Annals* 125: 200-28; May, 1926. Philadelphia: American Academy of Political and Social Science.

A consideration of relation of church to problem of crime, based on examination of prison records and correspondence with ministers, judges, prison officials, and others. Discusses church as a curb on crime, a factor in elimination of causes of crime, and its relation to the criminal.

F. Public Opinion[1]

171. LIPPMAN, WALTER. *Public Opinion.* New York: Macmillan Co., 1927. 427 p.

A discussion of forces entering into formation of public opinion, and need for knowledge of underlying facts in deciding issues.

[1] For other discussion of the influence of public opinion, see p. 382-85, "Campaigns of Education," in *Criminology* by Fred E. Haynes; also p. 40-3, "The Part the Public Plays," in *The Administration of Criminal Justice in Missouri*, summary of the Missouri Crime Survey, prepared by Raymond Moley. These two books are cited fully in other sections of this bibliography.

G. The School's Opportunity

1. *General considerations*[1]

172. BAGLEY, WILLIAM C. *Education, Crime, and Social Progress.* New York: Macmillan Co., 1931. 150 p.

A consideration of what education can do to fit society for new era of industrial progress and excessive individualism.

173. NATIONAL EDUCATION ASSOCIATION, RESEARCH DIVISION. "The Principal and Progressive Movements in Education." *Research Bulletin* 7: 45-104; March, 1929. Washington, D. C.: the Association.

A practical handbook for principals and organizations, covering certain problems, a knowledge of which seems essential to constructive supervision. Deals with mental life and physical health of children, individual differences, character, pre-school and parent education. Lists sources of information and organizations supplying useful material.

2. *Home and school cooperation*

174. REEVE, MRS. A. H., chairman. *Home and School Cooperation.* White House Conference on Child Health and Protection, Subcommittee on Cooperation of Home and School. New York: Century Co., 1932. 122 p.

Presents results of several surveys concerning actual and recommended relationships between school and home. Based on information supplied by contributing organizations and agencies, educators, and parents.

175. THOMAS, WILLIAM I., and THOMAS, DOROTHY SWAINE. *The Child in America.* New York: Alfred A. Knopf, 1928. Chapter 7, "Parent Education," p. 295-329.

The parent education movement developed from growing consciousness among parents of need for guidance.

176. VAN WATERS, MIRIAM. *Parents on Probation.* New York: New Republic, 1927. 333 p.

A consideration of problems encountered by parents in their relation to child and his environment.

3. *Community relationships*

177. GLUECK, ELEANOR TOUROFF. *The Community Use of Schools.* Baltimore: Williams and Wilkins Co., 1927. 222 p.

An examination of the schoolhouse as an instrumentality for organization of neighborhood life, in its civic, social, and recreational aspects. Based on returns from a questionnaire sent 6,353 school superintendents on community use of schoolhouses.

4. *Cooperation with the courts*

178. HOYT, GUY M. "The Relation of the School to the Juvenile Court." *Yearbook, 1929.* New York: National Probation Association, 450 Seventh Avenue, 1929. p. 109-13.

Recommends cooperation between school, juvenile court, and probation department. Describes program developed in Los Angeles schools.

179. JACKSON, LEROY F. "Public Schools and Probation." *Probation* 10: 1-2; February, 1932. New York: National Probation Association, 450 Seventh Avenue.

Recommends development of plan of cooperation between courts and educational forces. States that, "The probation system of the courts is founded on a conviction that education is the only means of controlling human behavior and is an attempt to re-educate persons whom the normal agencies of education have failed to reach."

180. VANN, HAROLD K. "The School and the Juvenile Court." *Yearbook, 1929.* New York: National Probation Association, 450 Seventh Avenue, 1929. p. 114-18.

Calls attention to closer understanding desirable between court and school. Makes reference to practices in Seattle, Washington.

5. *Adult education*

181. CARTWRIGHT, MORSE A., and ELY, MARY. *Adult Education in the United States of America.* New York: American Association for Adult Education, 60 East 42nd Street, 1929. 16 p.

A survey of forms of adult education in the United States.

182. PEFFER, NATHANIEL. *New Schools for Older Students.* New York: Macmillan Co., 1926. 250 p.

One of a series of studies on adult education, made for Carnegie Corporation of New York. Discusses institute, individual schools, national associations, and other agencies. Chapter 8, p. 203-43, covers "Workers' Education."

6. *Character education*[2]

183. BOWYER, VERNON L., WINTER, OLICE, and WILKINSON, GILBERT H., editors. "Character Education" *Sixth Yearbook,* Chicago Principals' Club. Chicago: the Club, June, 1931. 292 p.

Contains chapters on progress in character education, and character education plans and ideas found in Chicago public schools.

184. GERMANE, CHARLES E., and GERMANE, EDITH GAYTON. *Character Education,* New York: Silver, Burdette and Company, 1929. 224 p.

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[1] For other general discussions of the relation of education to the problem of crime and delinquency, see the following references, cited fully in other sections of this bibliography: Beeley, Arthur L., director. *Boys and Girls in Salt Lake City,* p. 52; Best, Harry. *Crime and the Criminal Law in the United States,* p. 262-70, 578-80; Dow, Samuel Grove. *Crime and Its Prevention,* p. 47-9, 317-26; Gillin, John Lewis. *Criminology and Penology,* p. 223-27; Parsons, Philip Archibald. *Crime and the Criminal,* p. 174-76, 369-70; Shulman, Harry M. *A Study of Problem Boys and their Brothers,* p. 13-14.

[2] See also the following reference, cited fully in other sections of this bibliography: Thomas, William I., and Thomas, Dorothy Swaine. *The Child in America,* "Character Education in the Schools," p. 273-94.

A book planned for teachers and parents which presents theory and practice of character building through a program designed to further cooperation between school and home. Defines character education as "a process through which the child learns to make wholesome social adjustments to his many perplexing life situations."

185. NATIONAL EDUCATION ASSOCIATION, DEPARTMENT OF CLASSROOM TEACHERS. "The Classroom Teacher and Character Education." *Seventh Yearbook*. Washington, D. C.: the Department, June, 1932, 272 p.

A handbook for use of teachers desiring to develop desirable character in pupils. Emphasizes fundamental principles in the field of character and personality, and also gives specific illustrations of actual classroom activities and school procedure.

186. NATIONAL EDUCATION ASSOCIATION, DEPARTMENT OF SUPERINTENDENCE. "Character Education." *Tenth Yearbook*. Washington, D. C.: the Association, February, 1932. 536 p.

Presents points of view to stimulate thought and discussion in direction of a more constructive school life. Does not attempt to present a character education program.

187. NATIONAL EDUCATION ASSOCIATION, DEPARTMENT OF EDUCATIONAL RESEARCH (American Educational Research Association). "Tests of Personality and Character." *Review of Educational Research* 2: 183-270; June, 1932.

A summary of research in the field of character testing. Includes a comprehensive bibliography.

7. *Health education*

188. WOOD, THOMAS D., chairman. *The School Health Program*. White House Conference on Child Health and Protection, Committee on the School Child. New York: Century Co., 1932.

A study of health services and health training in the schools. Represents a condensation of several subcommittee reports on the school child.

WHEN THE child can find near at home, with companions of his own choice, opportunity for all that his ever widening sphere of craving and interests demands; when his community, including all groups, private, municipal, commercial, holds as its greatest asset the security and development of all of its children; when the spirit of the neighborhood reflects our most ideal teaching, then will the community help to minimize those behavior problems that handicap the lives of so many children.—*The White House Conference on Child Health and Protection. The Delinquent Child. Report of the Committee on Socially Handicapped—Delinquency, Section IV. New York: The Century Co., 1932. p. 224.*

EVERY CHILD, regardless of race, creed, social position, residence, or physical condition, should have the opportunity for the fullest development of his individual powers through education.

Character is the major outcome of education. All activities of the school should contribute to the habits and attitudes which manifest themselves through integrity in private life, law observance, and intelligent participation in civic affairs.

The school program for physical and mental health should supplement the efforts of the home to establish habits of clean and wholesome living.

Children should be taught how to think more than what to think. Education should prepare the rising generation to meet the social and economic problems of an ever-changing world.

No child should engage in premature or excessive employment that deprives him of the benefits of comradeship, of play, and of education.—*Adopted by the Representative Assembly of the National Education Association at Atlantic City, N. J., July 1, 1932.*

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YEARBOOKS

The Classroom Teacher and Character Education. Seventh Yearbook, Department of Classroom Teachers, 1932. 272 p. $1.50.

The Principal and His Community. Eleventh Yearbook, Department of Elementary School Principals, 1932. 494 p. $2.00.

Character Education. Tenth Yearbook, Department of Superintendence, 1932. 536 p. $2.00.

MISCELLANEOUS

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FOREWORD

TEN YEARS ago in the first of these *Research Bulletins* the following Foreword appeared:

> In this time of confusion and unrest there is need for clear thinking in the shaping of educational legislation. It is the state legislature that shapes the policies and work of the public schools. But, although education is a state-controlled function, the welfare of the nation as a whole is affected by the efficiency of its forty-eight school systems.
>
> Where state school systems are adequate they must be kept so; where they are inadequate they must be strengthened if the national welfare is not to suffer. The failure of any one state to meet its educational responsibilities lowers the whole nation's tone. Freedom of movement, made easier with each advance in transportation, is guaranteed to all. No state can confine its educational shortcomings to its own borders. The illiteracy, ignorance, and economic inefficiency that is the problem of one state today becomes, through the railroad and the automobile, the problem of other states tomorrow.

Once again the schools of the nation face a severe crisis. There is much talk of tax reduction, often without adequate consideration of results. The hard-won educational progress of the last ten years is in jeopardy. Only a well-informed public and a united teaching profession can stem the tide which threatens the very existence of public schools in some communities and the continued efficiency of the schools throughout the nation.

This *Bulletin* should reach every state legislator in America. It should be placed in the hands of every civic leader. Such distribution will be most effective if handled by local and state school officials. During American Education Week, particularly, the facts contained in this *Bulletin* should be placed before newspaper and magazine editors, service clubs, women's clubs, and school boards. The case for good public schools cannot be better sustained than by an appeal to well-organized and authentic facts.

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

The Need for Facts on Public School Finance

The problem generally faced by the public schools at the present moment may be concisely summarized in four words: *increased responsibilities; decreased resources.* The responsibilities are shown by the unusually rapid increase in school enrolment due to the depression. Thus, in practically every community hundreds or thousands of young men and women, unable to find work, are continuing their training in the public schools and preparing themselves for the opportunities which will open before them when more prosperous times return. It is well that they do so. If the ratio of school enrolment to school population which prevailed in 1920 were unchanged today, nearly two million additional young people would be added to the competition for jobs.

While the schools are thus being given a task larger, more difficult and in many ways more important, than ever before, the financial resources which should enable them to do this work are being threatened or actually curtailed. About three out of every four cities throughout the United States are attempting to operate on a smaller school budget this year than last year. Present estimates are that 1932 school budgets were about 4 percent below 1931, and that 1933 will show additional cuts averaging about 8 percent.[1] Education has evidently carried a significant share of the general retrenchment in public expenditures. Such retrenchment cannot continue indefinitely if the schools are to perform their important functions with reasonable success.

The curtailment of educational support which has marked the past two years stands in sharp contrast to the policy followed in previous periods of economic recession.[2] During the depression of 1837-43 public school support, both legislative and financial, increased in most states outside the slave-holding region. Under the leadership of Horace Mann, school revenues in Massachusetts increased 35 percent in the seven-year period, and similar gains were registered in other states. During and following the depression seventies (1873-78) school expenditures rose about 53 percent. Except at the very end of the period, expenditures per pupil rose year by year. School terms were lengthened, high schools established, and compulsory education laws enacted. The panic of '93 and the business recession which followed it until 1898 did not bring about material reductions in expenditures for public education. Teachers' salaries rose slightly, school opportunities were extended, and the increase in expenditures for schools outran the increases in property valuations. With a few exceptions, public schools in the several states received strong and growing financial support. Similar statements might be made for the depressions of 1907 and 1921.

It is interesting to speculate on the reasons for the apparent difference between the fortunes of public education in this and previous depressions. Probably the difference arises from causes that are many and complicated. The fact remains that the present depression is the first one in which school support has been generally reduced. This fact constitutes a challenge to educational leadership which cannot be ignored. The educator knows the importance of his work and senses the dangers in its neglect. He is called on to bring the public to the same point of view.

A wisely operated school system is the indispensable basis for such an appeal. But there is need, in addition, for a body of facts about the cost of public education as compared with national income, tax collections, and other public and private expenditures. The unsupported assertion that education is costing too much is best answered by referring to such facts as these: that schools have never absorbed as much as 4 percent of the national income; that the proportion of the national income devoted to public education remained practically constant for a decade prior to 1929; that the proportion of municipal expenditures devoted to education is lower now than at any time since 1922; that America spends about five times as much for passenger automobiles as it does for public schools; that effective public schools are essential to the welfare of our country; and that funds for public education have been, on the whole, wisely and intelligently expended.

To make some of this data available is the purpose of this *Bulletin.* A summary is provided on page 226.

[1] National Education Association, Department of Superintendence and Research Division. *Some Trends in City School Finance, 1932-33.* Educational Research Service, Circular No. 5, 1932. Washington, D. C.: the Association, May, 1932. 34 p.

[2] Pitkin, Royce S. *Public School Support in the United States during Periods of Economic Depression.* Unpublished doctoral dissertation submitted to Teachers College, Columbia University, New York City, 1932.

National Income and Public School Expenditures

The Facts for the Nation

For practical purposes, we may think of the national income as the total amount received by the people from wages, salaries, profits, interest, and the like.[1] For the year 1930, this sum may be conservatively estimated at $78,000,000,000.[2] In the same year, according to the United States Office of Education, $2,615,068,177 [3] was expended for all tax-supported public schools of elementary, secondary, and collegiate grade. An income of $78,000,000,000 and public school expenditures of $2,615,068,177 give a figure of 3.35 percent of the national income devoted to public schools.[4]

The Facts for the States

Table 2 estimates the yearly income of each state in 1930 and compares it with the amount spent for public schools. For example, the total expenditure for all public schools in Alabama in 1930 was $28,420,601 and its income for the same year is estimated at $826,020,000. Alabama's school bill in 1930 was, therefore, 3.44 percent of the total income of its inhabitants.

In studying Table 2, it is essential to have in mind that whether a state spends a large or a small percent of its income for schools is not, in and by itself, a matter of primary significance. No state should be commended merely because it spends a small percent or a large percent of its income for schools.

A more fundamental approach to this problem must begin with the realization that expenditures for schools are an investment. Like other good investments, wisely expended school money constitutes no diminution of the national income. Expenditures for schools do not reduce the total amount of income available for spending. Quite apart from the wholesale economic and social effects of education itself, is the undeniable fact that two and a quarter billion dollars spent for education is also two and a quarter billion dollars in national income. It is spent again, and usually immediately, for goods and services by those to whom it is paid.

Furthermore, the desirable economic, social, and political effects of education are universally acknowledged by men of wide vision and public spirit. Ignorance never made a good workman, a good neighbor, a good citizen, or a good parent. Human assets are of far more vital importance than natural resources and deserve correspondingly more care and thought in their conservation. The special human aptitudes, the technical knowledge, and the social intelligence which must constitute the final basis for na-

[1] For more complete discussion and definition of *income* see: Mitchell, Wesley C. and Others. *Income in the United States, 1909-1919*. Vol. I. New York: Harcourt Brace and Co., 1921. p. 1-11; Leven, Maurice. *Income in the Various States, 1919, 1920, and 1921*. New York: National Bureau of Economic Research, 1925. p. 19-20; and King, Willford I. The *National Income and Its Purchasing Power*. New York: National Bureau of Economic Research, 1930. p. 41-3.

[2] The most reliable estimates of national income as defined above are made by the National Bureau of Economic Research. The estimates of this agency have been used by the Research Division since 1923 and it seems desirable to continue this practice. However, estimates for 1930 by the Bureau will not be available for several months. Such preliminary figures as are now available from the National Bureau of Economic Research suggest that the sum used in this Bulletin, $78,000,000,000, is probably too low rather than too high. A detailed statement of the method used in estimating national income together with the latest reported data on this topic may be obtained by addressing the Research Division.

[3] While this Bulletin was in press, the U. S. Office of Education published figures which make it possible to eliminate certain duplications from the total United States figure for public school expenditures. These duplications are not, however, eliminated from the individual state figures. The total used in this Bulletin is the sum of the state figures. These duplications constitute less than three tenths of one percent of the total cost of public education.

[4] The corresponding percent in 1928 was 2.74. The increase from 1928 to 1930 has been due very largely to the decrease in national income rather than to the increase in school costs.

TABLE 1.—NATIONAL INCOME AND PUBLIC SCHOOL COSTS, 1930

Item	Amount	Percent of national income
National income	$78,000,000,000	100.00
Cost of public schools:		
Elementary and secondary	$2,320,776,036	2.97
Colleges and universities	231,199,679	.30
Teacher-training institutions	63,092,462	.08
Total	$2,615,068,177	3.35

Sources: School costs calculated from various reports of the U. S. Department of Interior, Office of Education; income figure is an estimate based on figures of the National Bureau of Economic Research.

tional economic welfare are highly perishable assets. A single generation of neglect may impair national progress for many generations in the future. Education is the barrier of defense erected between civilization and savagery. Weaken the fence and civilization falters; destroy the barrier and savagery reclaims humanity once more. To be sure, savagery is not the only alternative to our present highly organized civilization. We could return to the level of living and economic efficiency obtaining before 1900. But most of us would prefer not to do this. We would prefer to maintain recent gains, to restore temporary recent losses, and to advance still further. To do this we must maintain and improve our human assets. This can be done only by keeping our educational facilities in first-class condition.

It is in the light of these considerations that Table 2 and the other tables of this *Bulletin* should be examined. Does analysis of the figures presented indicate that your state looks upon the uninterrupted maintenance of first-rate schools as a matter of major significance? Or does the proportion of your state's income devoted to educational support indicate that this function is considered a minor project? Has every reasonable effort been made to place the financing of your schools on a sound basis? Or are some features of your state school system less effective than they should be due to inadequate plans for financial support?

The tables are so arranged that the position of the states may be compared with that of others. This arrangement does not imply that uniformity among states is necessarily desirable in the items with which the tables deal. Some states should, under existing conditions, invest a higher percent of their total income in education than others. Some states have from five to six times as much income and wealth behind each child to be educated as others. Hence variation in the percent of income devoted to school support is to be expected.

CHART I

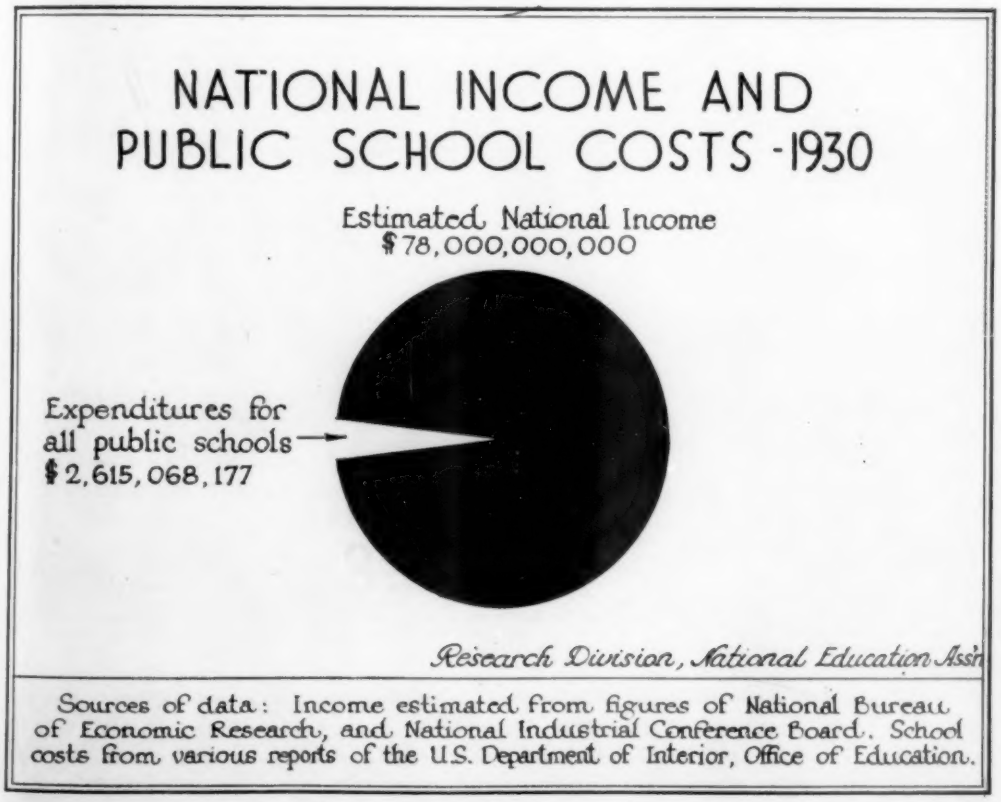


TABLE 2.—INCOME AND PUBLIC SCHOOL COSTS BY STATES, 1930

States	Expended for public elementary and secondary schools	Receipts for tax-supported universities, colleges; and expenditures for tax-supported teacher-training institutions	Total cost of public schools, elementary, secondary, and collegiate (col. 2 plus col. 3)	Estimated income	Percent school cost is of income
1	2	3	4	5	6
United States	$2,320,776,036	$294,292,141	$2,615,068,177	$78,000,000,000	3.35
Alabama	21,657,857	6,762,744	28,420,601	826,020,000	3.44
Arizona	10,878,167	2,372,758	13,250,925	261,300,000	5.07
Arkansas	14,148,155	2,592,194	16,740,349	646,620,000	2.59
California	148,816,078	18,014,260	166,830,338	3,834,480,000	4.35
Colorado	24,555,281	4,843,551	29,398,832	765,180,000	3.84
Connecticut	35,741,255	2,049,908	37,791,163	1,214,460,000	3.11
Delaware	5,108,186	1,315,643	6,423,829	177,060,000	3.63
District of Columbia	12,666,081	208,316	12,874,397	557,700,000	2.31
Florida	18,533,721	3,793,741	22,327,462	475,800,000	4.69
Georgia	18,676,829	4,000,181	22,677,010	1,127,100,000	2.01
Idaho	10,326,210	1,769,205	12,095,415	288,600,000	4.19
Illinois	154,740,774	11,951,697	166,692,471	6,011,460,000	2.77
Indiana	63,329,806	10,069,128	73,398,934	1,905,540,000	3.85
Iowa	50,757,133	10,893,718	61,650,851	1,518,660,000	4.06
Kansas	38,843,407	6,956,336	45,799,743	1,162,980,000	3.94
Kentucky	22,973,665	5,919,391	28,893,056	1,085,760,000	2.66
Louisiana	21,835,855	3,246,136	25,081,991	859,560,000	2.92
Maine	11,185,706	1,756,552	12,942,258	526,500,000	2.46
Maryland	24,672,143	5,461,167	30,133,310	1,174,680,000	2.57
Massachusetts	86,891,313	3,491,256	90,382,569	3,896,880,000	2.32
Michigan	119,457,501	18,280,938	137,738,439	2,933,580,000	4.70
Minnesota	51,789,778	12,893,067	64,682,845	1,531,920,000	4.22
Mississippi	17,395,052	4,767,391	22,162,443	565,500,000	3.92
Missouri	56,470,043	6,727,198	63,197,241	2,223,000,000	2.84
Montana	13,678,881	2,019,823	15,698,704	385,320,000	4.07
Nebraska	27,142,345	5,343,199	32,485,544	806,520,000	4.03
Nevada	2,755,034	722,965	3,477,999	81,120,000	4.29
New Hampshire	6,935,522	2,057,671	8,993,193	326,040,000	2.76
New Jersey	117,633,537	2,881,436	120,514,973	2,864,160,000	4.21
New Mexico	6,799,409	2,106,203	8,905,612	193,440,000	4.60
New York	361,512,754	11,511,126	373,023,880	11,901,240,000	3.13
North Carolina	37,301,084	7,782,077	45,083,161	1,017,900,000	4.43
North Dakota	16,453,171	3,733,517	20,186,688	331,500,000	6.09
Ohio	145,910,353	16,593,866	162,504,219	4,532,580,000	3.59
Oklahoma	30,867,706[1]	7,520,693	38,388,399	1,143,480,000	3.36
Oregon	19,616,351	5,932,594	25,548,945	652,080,000	3.92
Pennsylvania	184,238,972	12,711,224	196,950,196	7,250,880,000	2.72
Rhode Island	13,259,880	791,331	14,051,211	572,520,000	2.45
South Carolina	15,332,324	3,825,231	19,157,555	632,580,000	3.03
South Dakota	15,304,063	2,463,068	17,767,131	382,200,000	4.65
Tennessee	22,880,371	4,757,015	27,637,386	949,260,000	2.91
Texas	78,323,048	15,215,722	93,538,770	2,812,680,000	3.33
Utah	11,643,061	1,925,917	13,568,978	280,020,000	4.85
Vermont	5,663,229	1,322,792	6,986,021	230,100,000	3.04
Virginia	23,636,186	8,920,650	32,556,836	1,087,320,000	2.99
Washington	33,612,352	7,054,466	40,666,818	1,171,560,000	3.47
West Virginia	28,242,563	4,923,270	33,165,833	841,620,000	3.94
Wisconsin	54,092,429	11,062,047	65,154,476	1,786,980,000	3.65
Wyoming	6,491,415	977,762	7,469,177	196,560,000	3.80

Read table thus: In 1930 the income of California is estimated to have been $3,834,480,000. Expenditures for public elementary and secondary schools in California in 1930 were $148,816,078; for public colleges, etc., California expends $18,014,260; making a total of $166,830,338 expended for all public schools in California, or 4.35 percent of the total income of that state. In the nation as a whole, the corresponding percent was 3.35 percent. Similarly read figures for other states.

Sources of data: Figures of columns 2, 3, and 4 from U. S. Department of the Interior, Office of Education, Bulletin, 1931, No. 20, Vol. II, Chapter II, IV, and V. The total cost of public education as given in column 4 omits, because of lack of data, expenditures of certain institutions, for example, institutions for the deaf, blind, and feeble-minded, etc. Also note that figures representing the collegiate costs are receipts rather than expenditures. In this Bulletin these figures have been treated as expenditures. The figure as to total national income is an estimate based on figures of the National Bureau of Economic Research and the National Industrial Conference Board. This total was distributed among the states of the Union on the bases of the average of the total national income found in each state in the years 1919, 1920, and 1921 as estimated by the National Bureau of Economic Research. Income estimated for each state will tend to be somewhat low in the case of those states where income during the past few years has increased more rapidly than in the United States as a whole. In states where income has increased less rapidly than in the nation as a whole during the last few years the estimates given in this table may be somewhat high.

[1] Preliminary figure. Revised figure should read $32,817,157.

National Wealth and the Value of Public School Property

The Facts for the Nation

The national wealth of the United States may be thought of as consisting of all those material things which possess value. The sum of all these values equals the total amount of national wealth.[1] A portion of the wealth of the nation exists in the form of school property—sites, buildings, and equipment.

What part of our national wealth is invested in school property? According to the National Industrial Conference Board the total wealth of the United States in 1930 was approximately $322,735,000,000. In the same year, according to the U. S. Office of Education, the value of public school property of all classes was $7,143,803,297. Less than 2¼ percent, therefore, of the national wealth exists in the form of school property.

Table 3 gives figures as to the nation's total wealth and the value of the property of public schools and colleges. This table shows that for every $100 of wealth possessed by the nation, $1.92 is invested in the buildings, grounds, and equipment of public elementary and secondary schools and an additional $.29 is invested in the plants of public colleges and universities. The property of public schools thus accounts for $2.21 of each $100 of the nation's wealth. The facts are shown graphically in Chart II.

The Facts for the States

Table 4 compares the percent of the wealth of each state which exists in the form of school property.

Only a minor part of the wealth of the nation is represented by its investment in public school property. In no state does the value of public school property amount to as much as 4 percent of the total value of tangible property.

[1] The value of securities is not included in this total, since securities do not in and of themselves constitute wealth but merely represent rights of ownership of wealth already included in the estimated total in other forms.

CHART II

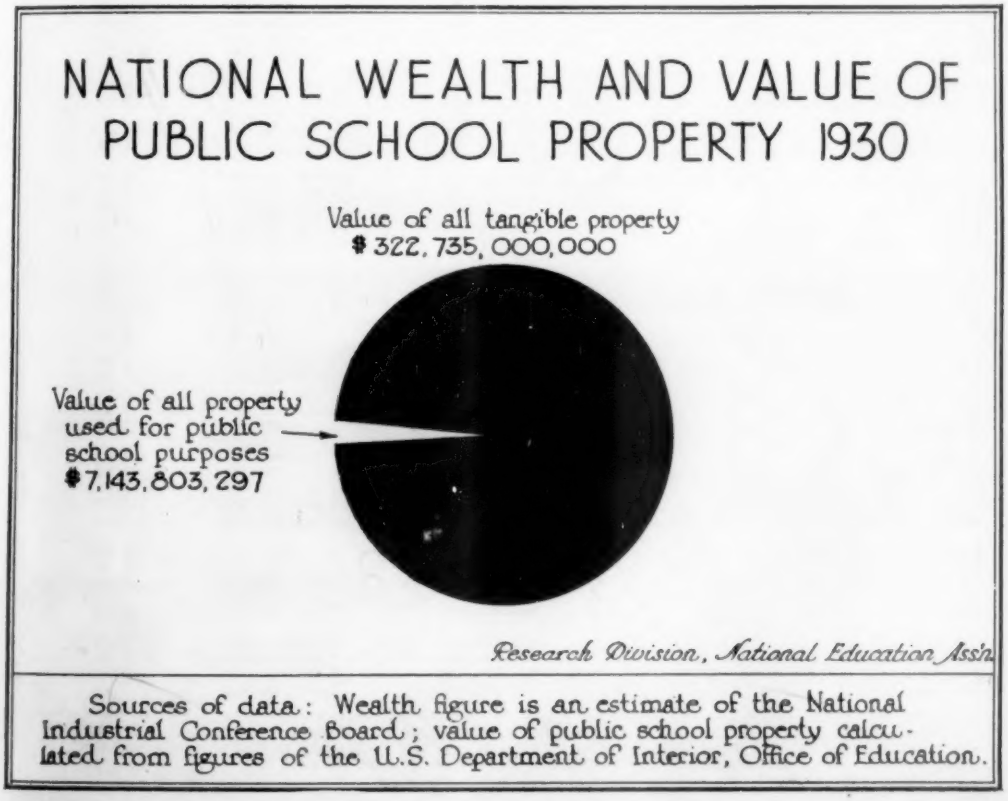


TABLE 3.—NATIONAL WEALTH AND VALUE OF PUBLIC SCHOOL PROPERTY, 1930

Item	Total amount	Percent of national wealth
National wealth	$322,735,000,000	100.00
Value of public school property:		
Elementary and secondary	6,211,327,040	1.92
College and university	748,376,441	.23
Teacher-training institutions	184,099,816	.06
Total	7,143,803,297	2.21

Sources: The figure on national wealth is the estimate for 1930 of the National Industrial Conference Board. Figures on value of property of elementary and secondary schools, colleges and universities, and teacher-training institutions are from the U. S. Department of the Interior, Office of Education, *Biennial Survey of Education, 1928-1930.*

TABLE 4.—NATIONAL WEALTH AND VALUE OF PUBLIC SCHOOL PROPERTY BY STATES, 1930

States	Value of public school property, elementary, secondary, and collegiate	Wealth (value of all tangible property)	Percent school property is of wealth
1	2	3	4
United States	$7,143,803,297	$322,735,000,000	2.21
Alabama	70,394,223	3,065,000,000	2.30
Arizona	23,309,391	1,366,000,000	1.71
Arkansas	44,052,511	2,655,000,000	1.66
California	489,877,152	15,433,000,000	3.17
Colorado	78,768,048	3,286,000,000	2.40
Connecticut	116,478,054	5,465,000,000	2.13
Delaware	15,816,863	646,000,000	2.45
District of Columbia	32,699,244	1,729,000,000	1.89
Florida	87,702,373	2,532,000,000	3.46
Georgia	64,032,507	4,005,000,000	1.60
Idaho	30,549,095	1,593,000,000	1.92
Illinois	476,142,847	22,655,000,000	2.10
Indiana	182,249,369	9,045,000,000	2.01
Iowa	154,638,482	10,686,000,000	1.45
Kansas	112,937,616	6,369,000,000	1.77
Kentucky	61,472,059	3,664,000,000	1.68
Louisiana	66,595,625	3,506,000,000	1.90
Maine	37,055,669	2,068,000,000	1.79
Maryland	79,592,471	4,100,000,000	1.94
Massachusetts	251,972,453	13,389,000,000	1.88
Michigan	398,436,219	11,781,000,000	3.38
Minnesota	203,680,486	8,741,000,000	2.33
Mississippi	57,540,009	2,237,000,000	2.57
Missouri	167,861,514	10,245,000,000	1.64
Montana	39,227,747	2,290,000,000	1.71
Nebraska	98,198,497	5,419,000,000	1.81
Nevada	8,179,870	547,000,000	1.50
New Hampshire	24,101,172	1,418,000,000	1.70
New Jersey	300,331,350	12,149,000,000	2.47
New Mexico	17,578,663	874,000,000	2.01
New York	931,461,525	37,766,000,000	2.47
North Carolina	136,358,043	4,719,000,000	2.89
North Dakota	53,206,485	2,490,000,000	2.14
Ohio	458,273,981	19,066,000,000	2.40
Oklahoma	108,705,277	4,048,000,000	2.69
Oregon	65,678,294	3,504,000,000	1.87
Pennsylvania	545,359,657	29,614,000,000	1.84
Rhode Island	37,021,212	1,982,000,000	1.87
South Carolina	56,598,068	2,476,000,000	2.29
South Dakota	49,445,753	3,024,000,000	1.64
Tennessee	67,857,601	4,373,000,000	1.55
Texas	264,270,858	10,067,000,000	2.63
Utah	35,422,156	1,582,000,000	2.24
Vermont	17,486,877	863,000,000	2.03
Virginia	104,844,672	5,046,000,000	2.08
Washington	107,367,337	5,242,000,000	2.05
West Virginia	91,726,464	4,817,000,000	1.90
Wisconsin	199,790,398	8,084,000,000	2.47
Wyoming	21,457,060	1,014,000,000	2.12

Read table thus: In 1930 the value of all tangible property in Alabama is estimated to have been $3,065,000,000. The value of public school property, elementary, secondary, and collegiate, in Alabama in 1930 was $70,394,223, or 2.30 percent of the value of all tangible property. Similarly interpret data for other states.

Sources of data: See table 3.

National Income and Governmental Costs

Although school support requires but a minor fraction of the nation's wealth and income, school costs are responsible for a considerable part of the total tax bill. Some consideration, therefore, must be given to the general problem of governmental costs as a whole.

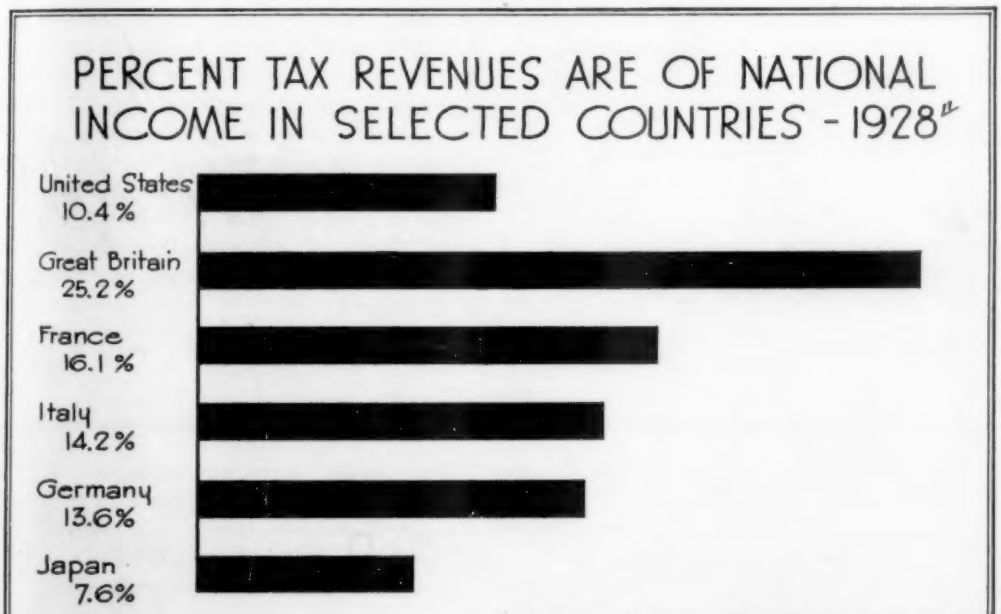
Total tax collections in the United States in 1930 were $10,266,000,000. Of this sum the federal government collected $3,468,000,000 or 4.45 percent; the state governments, $1,780,339,561, or 2.28 percent; and the municipal, county, and various other local governments, $5,017,789,000, or 6.43 percent of the national income. A summation of these percents indicates that total tax collections in the United States in 1930 amounted to 13.17 percent of our national income.

The United States and Other Countries Compared

None of the major European countries for which figures are available spends a smaller percentage of its income for taxes than does the United States. Great Britain, the nation which ranks next to the United States, both in national wealth and national income, devotes approximately 25 percent of its income to governmental costs. While the United States in 1928 spent 10.4 percent of its income for taxes, Germany spent nearly 14 percent; Italy more than 14 percent; and France over 16 percent. A graphic presentation of these relationships is given in Chart III.

The above percentages are based on estimates of national income for the year 1928, the latest year for which estimates of income in all of these countries could be obtained. It is probable, therefore, that they represent the situation as it existed before the economic depression rather than at the present time. If figures on both income and tax revenues in each of these countries were available for some later year, since the beginning of the depression, the difference between the percent of income devoted to taxes in the United States and in European countries would probably be found to be even greater than Chart III indicates.

CHART III



* National income figures are for 1928 in every case; tax revenue figures are those for year available nearest to 1928.
Sources of Data: Moulton, Harold G. and Ko, Junicki, *Japan; an Economic and Financial Appraisal*, National Bureau of Economic Research, National Industrial Conference Board, U.S Department of Commerce, *Statesmen's Yearbook*, 1930, and Comstock, Alzada, *Taxation in the Modern State*.

Furthermore, the disparity between the effort required in the United States and in other countries to support public activities cannot be adequately represented upon a mere percentage basis. A man with a yearly income of $5,000 is able to pay 5 percent of his income for taxes with less effort than a man with an income of $1,000. In the first case the payment probably requires little personal sacrifice in the form of reduction in the consumption of necessities such as food, clothing, and shelter. The payment of such a tax by the man of small income may involve such sacrifice, since his income is close to the level of subsistence.

The United States, in comparison with other countries, is in the position of a rich man. Its yearly income per person in 1928 was $752 as compared with $383 in Great Britain which ranks second. The income per capita in the United States was more than twice that of either France or Germany in 1928. The per capita wealth also, that is, the value of tangible property per person, is appreciably larger in the United States than in Great Britain—$2,629 as compared with $2,027 in the latter country. According to the latest figures [1] available, per capita wealth in France is $1,473; in Germany, $633; and in Italy, $607. These facts combine to show that the effort involved in the support of public enterprises in the United States is considerably less than in other countries.

Tax Collections by States

Table 5 gives estimates for the United States as a whole and for the several states of the amount of income and taxes collected.

An important explanation must be kept in mind when studying Table 5, especially Columns 3, 6, and 7 which relate to federal taxes. It is frankly admitted that it is impossible to trace accurately the state in which federal taxes are ultimately paid. For example, many large corporations, doing business in practically every state in the Union, pay their federal taxes in one state, in many instances, New York. Although these taxes are collected in New York they represent only in part a burden upon the citizens of that state. Another example: In 1930 the federal government collected 57 percent of its tobacco taxes, or $256,729,938,[2] in the State of North Carolina. This amount does not represent a tax burden upon the people of North Carolina alone. Every time a person buys a package of cigarettes, a box of cigars, or other tobacco products in any one of the forty-eight states, he pays a part of this tax through the stamp which is attached. In short, the fact that the federal government collects taxes within a certain state does not mean that the real burden of these taxes rests within that state. For these reasons Column 7 of Table 5 has been left blank except for the national figure.

The figures in Column 8 give a better picture of the ratio of income to state and local taxes collected. It should be held in mind, however, that the percentages of Column 8 represent an understatement of the tax burden in each state by the amount of the federal taxes which may be properly apportioned to each state. There is at present, however, no reliable method for determining just what this apportionment should be. Column 7 of Table 5 shows that for the nation as a whole federal tax collections represent 4.45 percent of income. It is certain, however, that this average does not apply to each of the states.

[1] *World's Almanac, 1932.* p. 335, 593.
[2] *Annual Report of the Secretary of the Treasury for the Fiscal Year Ended June 30, 1930.* p. 212.

MILLIONS of children and young people follow the old, worn way to the schoolhouse. There they must find at least the opportunities offered so freely to their predecessors. If there must be a choice, build a schoolhouse, and leave a road unbuilt, some streets unpaved. We must have education; it is America's boast. While other things are crumbling, our schools must be maintained.—*William Frederick Bigelow, Editor, Good Housekeeping.*

TABLE 5.—INCOME AND TAX COLLECTIONS BY STATES, 1930

States	Estimated income	Taxes collected by				Percent taxes collected by federal government is of income[1]	Percent taxes collected by local and state govt. is of income
		Federal government	State government	Local government	Federal, state and local government		
1	2	3	4	5	6	7	8
United States	$78,000,000,000	$3,468,000,000	$1,780,339,561	$5,017,789,000	$10,266,128,561	4.45	8.72
Alabama	826,020,000	19,074,000	22,025,283	32,937,000	74,036,283	.....	6.65
Arizona	261,300,000	4,855,200	9,679,319	17,356,000	31,890,519	.....	10.35
Arkansas	646,620,000	11,444,400	20,782,492	22,633,000	54,859,892	.....	6.71
California	3,834,480,000	169,238,400	90,261,126	342,828,000	602,327,526	.....	11.29
Colorado	765,180,000	16,646,400	15,204,161	45,996,000	77,846,561	.....	8.00
Connecticut	1,214,460,000	53,754,000	31,967,196	73,945,000	159,666,196	.....	8.72
Delaware	177,060,000	39,535,200	12,662,158	5,327,000	57,524,358	.....	10.16
Dist. of Col	557,700,000	17,340,000	.....	29,578,000	46,918,000	.....	5.30
Florida	475,800,000	22,888,800	22,098,146	69,084,000	114,070,946	.....	19.16
Georgia	1,127,100,000	25,316,400	28,414,191	40,708,000	94,438,591	.....	6.13
Idaho	288,600,000	2,774,400	5,580,042	20,383,000	28,737,442	.....	9.00
Illinois	6,011,460,000	271,544,400	82,032,751	320,194,000	673,771,151	.....	6.69
Indiana	1,905,540,000	39,882,000	41,265,027	134,507,000	215,654,027	.....	9.22
Iowa	1,518,660,000	23,929,200	34,294,993	105,041,000	163,265,193	.....	9.17
Kansas	1,162,980,000	24,969,600	25,123,426	85,994,000	136,087,026	.....	9.55
Kentucky	1,085,760,000	43,003,200	29,320,688	47,289,000	119,612,888	.....	7.06
Louisiana	859,560,000	21,154,800	27,546,043	49,812,000	98,512,843	.....	9.00
Maine	526,500,000	11,791,200	17,640,549	24,213,000	53,644,749	.....	7.95
Maryland	1,174,680,000	44,390,400	22,807,838	55,017,000	122,215,238	.....	6.63
Massachusetts	3,896,880,000	130,396,800	53,524,782	260,929,000	444,850,582	.....	8.07
Michigan	2,933,580,000	153,632,400	98,108,314	250,440,000	502,180,714	.....	11.88
Minnesota	1,531,920,000	40,922,400	45,258,140	114,673,000	200,853,540	.....	10.44
Mississippi	565,500,000	11,097,600	13,666,588	48,772,000	73,536,188	.....	11.04
Missouri	2,223,000,000	75,949,200	38,714,306	111,130,000	225,793,506	.....	6.74
Montana	385,320,000	4,855,200	7,223,235	26,888,000	38,966,435	.....	8.85
Nebraska	806,520,000	11,791,200	16,530,200	53,394,000	81,715,400	.....	8.67
Nevada	81,120,000	2,080,800	2,579,723	4,981,000	9,641,523	.....	9.32
New Hampshire	326,040,000	5,895,600	8,672,294	18,764,000	33,331,894	.....	8.42
New Jersey	2,864,160,000	137,332,800	88,072,482	254,767,000	480,172,282	.....	11.97
New Mexico	193,440,000	2,774,400	6,103,401	8,575,000	17,452,801	.....	7.59
New York	11,901,240,000	946,764,000	261,086,683	852,888,000	2,060,738,683	.....	9.36
N. Carolina	1,017,900,000	277,093,200	35,973,065	64,128,000	377,194,265	.....	9.83
N. Dakota	331,500,000	3,814,800	7,143,584	27,769,000	38,727,384	.....	10.53
Ohio	4,532,580,000	169,932,000	61,650,086	314,206,000	545,788,086	.....	8.29
Oklahoma	1,143,480,000	28,437,600	25,761,000	65,967,000	120,165,600	.....	8.02
Oregon	652,080,000	10,057,200	23,784,858	45,403,000	79,245,058	.....	10.61
Pennsylvania	7,250,880,000	264,608,400	139,293,381	361,135,000	765,036,781	.....	6.90
Rhode Island	572,520,000	17,686,800	15,446,526	26,421,000	59,554,326	.....	7.31
So. Carolina	632,580,000	10,750,800	18,427,317	29,778,000	58,956,117	.....	7.62
So. Dakota	382,200,000	4,161,600	12,123,166	32,461,000	48,745,766	.....	11.67
Tennessee	949,260,000	27,744,000	26,954,276	47,517,000	102,215,276	.....	7.85
Texas	2,812,680,000	64,158,000	79,068,453	130,764,000	273,990,453	.....	7.46
Utah	280,020,000	5,548,800	9,628,797	16,297,000	31,474,597	.....	9.26
Vermont	230,100,000	3,814,800	8,603,612	10,788,000	23,206,412	.....	8.43
Virginia	1,087,320,000	103,693,200	33,626,577	46,582,000	183,901,777	.....	7.38
Washington	1,171,560,000	20,808,000	31,425,963	71,152,000	123,385,963	.....	8.76
West Virginia	841,620,000	19,420,800	20,780,603	50,936,000	91,137,403	.....	8.52
Wisconsin	1,786,980,000	47,511,600	48,416,384	137,937,000	233,864,984	.....	10.43
Wyoming	196,560,000	1,734,000	3,986,336	9,505,000	15,225,336	.....	6.86

Read table thus: In 1930 the income of Colorado is estimated to have been $765,180,000. In this state the taxes collected by the federal government during the same year were $16,646,400; by the state government, $15,204,161; by the local governments, $45,996,000; making a total of $77,846,561 taxes collected. State and local taxes in this state constitute a sum equal to 8.00 percent of the income of all the people in Colorado. Similarly interpret data for other states.

Sources of data: The figure as to total national income is an estimate based on figures of the National Bureau of Economic Research and the National Industrial Conference Board. This total was distributed among the states of the Union on the bases of the average of the total national income found in each state in the years 1919, 1920, and 1921 as estimated by the National Bureau of Economic Research. Income estimated for each state will tend to be somewhat low in the case of those states where income during the past few years has increased more rapidly than in the United States as a whole. In states where income has increased less rapidly than in the nation as a whole during the last few years the estimates given in this table may be somewhat high. The total figures for the United States as to amount of taxes collected by the federal, state, and local governments, are those of the National Industrial Conference Board as given in Table 24, p. 77 of *Cost of Government in the United States, 1929-30*. Total federal taxes were distributed among the states on the basis of the percent of federal taxes collected in each state as given in Table 34, p. 103-4 of *Cost of Government in the United States, 1929-30*. Figures as to taxes collected by state governments in the various states are from the U. S. Department of Commerce, Bureau of Census. Figures as to amount of taxes collected by local governments in the various states are from Table 40, p. 114-5 of *Cost of Government in the United States, 1929-30*.

[1]The percent which federal taxes is of income in the several states is not reported here because of the impossibility of tracing the state in which federal taxes are ultimately paid. The fact that the federal government collects taxes within a certain state has no definite connection with the total tax burden borne by the income of the people of that state.

School Costs and Other Governmental Costs

Confusion often arises as to the portion of tax money expended for public education or for other purposes. This is due primarily to the fact that three types of governmental units—federal, state, and local—collect taxes. The mistake is sometimes made of comparing all school costs with the taxes collected by one or at most two of these three governmental units, with resulting exaggeration of the proportion of tax money going to the schools. In a given local community, the cost of local governmental enterprise, such as roads, may be divided between the local government, the state, and the federal government, while schools may be almost wholly supported by a local tax. Approximately 83 percent of public elementary and secondary school revenue comes from taxes levied in local jurisdictions. On the other hand, less than 50 percent of all taxes is collected by governmental units smaller than the state.

The annual investment in public education in the United States amounts to approximately 25 percent of the taxes collected for all public purposes. For every dollar expended for public schools we expend three dollars for other public purposes.

The Major Tax Bills in the United States

Since education is one of the most important functions of government, one is not surprised to find that it is one of the chief objects to which public expenditures are directed. The major tax bills in the United States together with the amounts devoted to them in 1929 [1] are shown in Table 6 and Chart IV. As will be seen from Table 6, education ranks first among all purposes of local expenditures, but it receives less than 1 percent of federal expenditures and is only second to highways among the purposes for which state government moneys are expended. A glance at Chart IV will show that a smaller amount of money is devoted annually to public education by federal, state, and local governments combined than is paid out in one year by the federal government alone toward the cost of past and future wars.

Chart IV also shows the sources of public revenue. The local governments were responsible for more than half (57.5 percent of net, and 54.6 percent of gross expenditures) of the total cost of government in the United States

[1] The latest year for which data on local expenditures for all purposes are available is 1929.

TABLE 6.—PURPOSES OF GOVERNMENTAL EXPENDITURES, 1929

Purposes	Federal (millions)	State (millions)	Local (millions)	Total (millions)	Percent of net expenditures	Percent of gross expenditures
1	2	3	4	5	6	7
1. Education[1]	$[illegible].8	$548.6	$1925.5	$2489.9	23.8	19.1
2. Highways	97.4	669.2	1169.9	1936.5	18.5	14.8
3. Protection	1567.6[2]	174.6	462.7[3]	2204.9	21.1	16.9
4. Public utilities	162.7	14.8	323.9[3]	501.4	4.8	3.9
5. Social welfare	87.4	253.7	569.5[3]	910.6	8.8	7.0
6. Economic development	194.3	65.2	.....	259.5	2.5	1.9
7. General government	437.5	126.7	196.4[3]	760.6	7.2	5.8
8. Miscellaneous	18.7	7.3	29.7[3]	55.7	.5	.4
9. Unclassified local	.....	.....	1335.9	1335.9	12.8	10.2
Total net expenditures[4]	$2581.4	$1860.1	$6013.5	$10,455.0	100.0	80.0
Percent	24.7	17.8	57.5	100.0		
10. Debt redemption and interest	1353.4	140.9	1112.6	2606.9	.....	20.0
Total gross expenditures[4]	$3934.8	$2001.0	$7126.1	$13,061.9		
Percent	30.1	15.3	54.6	100.0	.....	100.0

[1] Net expenditures for education, exclusive of debt service which is included in Item 10. It is estimated on the basis of U. S. Office of Education figures that expenditures for retirement of, and interest on educational debt were about $260,000,000 in 1929. On this basis gross expenditures for education amounted to about $2,750,000,000 or 21 percent of total gross expenditures for all purposes of federal, state, and local governments.

[2] It is estimated by the Research Division that approximately $1,500,000,000 of this expenditure is due to the cost of past and future wars. If to this amount is added federal expenditures for debt redemption and interest of $1,353,400,000, the total expenditure of the federal government due to war amounted to about $2,853,400,000 in 1929 or 22 percent of gross expenditures of all governments for all purposes.

[3] Expenditures of local governments of less than 30,000 population are excluded here. Combined expenditures of local governments of less than 30,000 population amounted to $1,335,900,000, shown in this table as Item 9.

[4] Gross expenditures are net expenditures plus expenditures for debt redemption and interest.

Source: National Industrial Conference Board. *Cost of Government in the United States, 1929-30*, p. 20-21.

in that year. The federal government paid 30.1 percent of the total, and the state governments, 15.3 percent. The tax sources from which the money to meet these payments was drawn were as follows:

Property taxes:		
State	$459,084,000	
Local	4,446,940,000	
Total	$4,906,024,000	(49 percent)
Income taxes:		
Federal	$2,331,274,000	
State	74,595,000[1]	
Total	$2,405,869,000	(24 percent)
U. S. Customs	$610,900,000	(6 percent)
Federal excises	538,664,000	(5 percent)
State gasoline taxes	282,579,000	(3 percent)
State business taxes	272,871,000	(3 percent)
All other taxes	963,880,000	(10 percent)

[1] Corporation excise and franchise taxes measured by net income are omitted here and included with state business taxes.

Tax Collections and School Costs by States

Table 7 presents facts concerning the ratio of school costs to tax collections by the various governmental units. For example, in Connecticut the total tax collections in 1930 by federal, state, and local governments were $159,666,196. In the same year this state expended $37,791,163 for public elementary, secondary, and college education. The amount expended for schools was, therefore, 23.7 percent of all tax collections in this state, or, if federal tax collections are excluded, 35.7 percent of the taxes collected by the state and by the local governmental units. For every dollar expended for public schools in this state approximately three dollars are collected for the support of other governmental enterprises. Similar figures are given for the United States and for each of the states in Chart V.

CHART IV

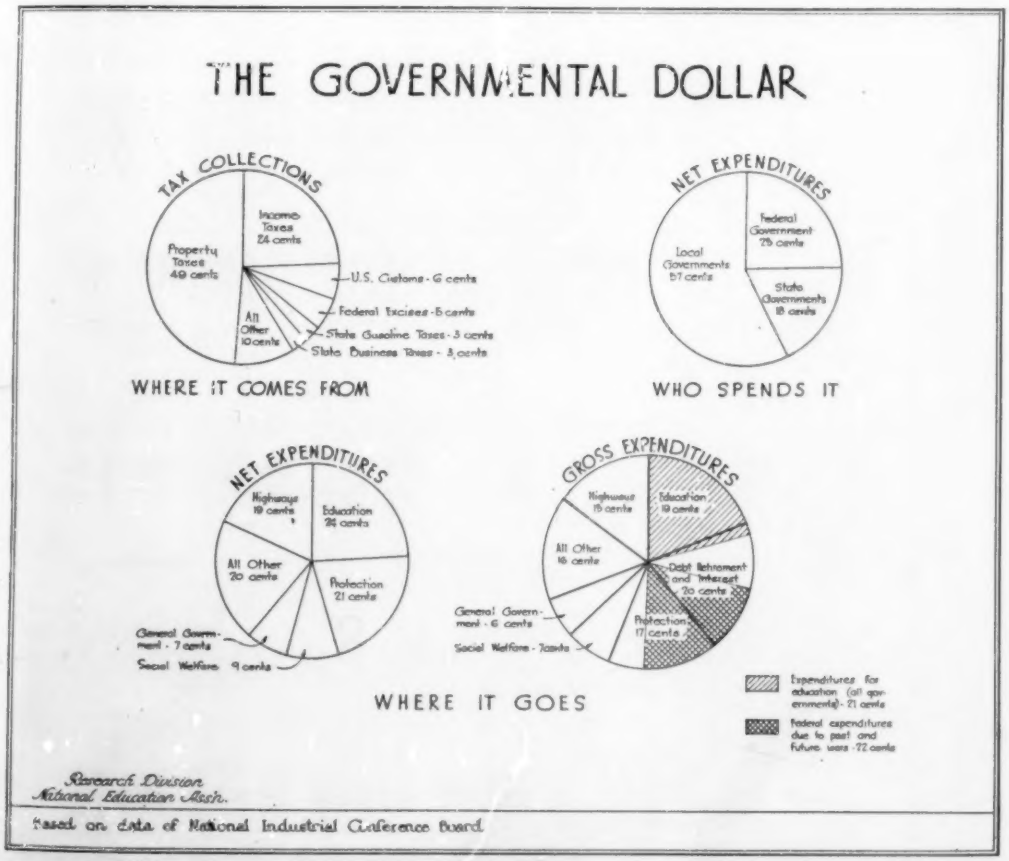


TABLE 7.—TAX COLLECTIONS AND PUBLIC SCHOOL COSTS BY STATES—1930

States	Cost of public education, elementary, secondary, and collegiate	Taxes collected by				Percent cost of schools is of the tax collections of		
		Federal government	State government	Local government	Federal, state, and local governments	Federal government	State and local governments	Federal, state, and local governments
1	2	3	4	5	6	7	8	9
United States	$2,615,068,177	$3,468,000,000	$1,780,339,561	$5,017,789,000	$10,266,128,561	75.41	38.47	25.47
Alabama	28,420,601	19,074,000	22,025,283	32,937,000	74,036,283	149.00	51.71	38.39
Arizona	13,250,925	4,855,200	9,679,319	17,356,000	31,890,519	272.92	49.01	41.55
Arkansas	16,740,349	11,444,400	20,782,492	22,633,000	54,859,892	146.28	38.56	30.51
California	166,830,338	169,238,400	90,261,126	342,828,000	602,327,526	98.58	38.52	27.70
Colorado	29,398,832	16,646,400	15,204,161	45,996,000	77,846,561	176.61	48.04	37.77
Connecticut	37,791,163	53,754,000	31,967,196	73,945,000	159,666,196	70.30	35.68	23.67
Delaware	6,423,829	39,535,200	12,662,158	5,327,000	57,524,358	16.25	35.71	11.17
District of Columbia	12,874,397	17,340,000	.....	29,578,000	46,918,000	74.25	43.53	27.44
Florida	22,327,462	22,888,800	22,098,146	69,084,000	114,070,946	97.55	24.49	19.57
Georgia	22,677,010	25,316,400	28,414,191	40,708,000	94,438,591	89.57	32.81	24.01
Idaho	12,095,415	2,774,400	5,580,042	20,383,000	28,737,442	435.97	46.59	42.09
Illinois	166,692,471	271,544,400	82,032,751	320,194,000	673,771,151	61.39	41.44	24.74
Indiana	73,398,934	39,882,000	41,265,027	134,507,000	215,654,027	184.04	41.76	34.04
Iowa	61,650,851	23,929,200	34,294,993	105,041,000	163,265,193	257.64	44.25	37.76
Kansas	45,799,743	24,969,600	25,123,426	85,994,000	136,087,026	183.42	41.22	33.65
Kentucky	28,893,056	43,003,200	29,320,688	47,289,000	119,612,888	67.19	37.71	24.16
Louisiana	25,081,991	21,154,800	27,546,043	49,812,000	98,512,843	118.56	32.42	25.46
Maine	12,942,258	11,791,200	17,640,549	24,213,000	53,644,749	109.76	30.92	24.13
Maryland	30,133,310	44,390,400	22,807,838	55,017,000	122,215,238	67.88	38.72	24.66
Massachusetts	90,382,569	130,396,800	53,524,782	260,929,000	444,850,582	69.31	28.74	20.32
Michigan	137,738,439	153,632,400	98,108,314	250,440,000	502,180,714	89.65	39.52	27.43
Minnesota	64,682,845	40,922,400	45,258,140	114,673,000	200,853,540	158.06	40.44	32.20
Mississippi	22,162,443	11,097,600	13,666,588	48,772,000	73,536,188	199.70	35.49	30.14
Missouri	63,197,241	75,949,200	38,714,306	111,130,000	225,793,506	83.21	42.18	27.99
Montana	15,698,704	4,855,200	7,223,235	26,888,000	38,966,435	323.34	46.02	40.29

				20,888,000	38,966,435	323.34	46.02	40.29

Nebraska	32,485,544	11,791,200	16,530,200	53,394,000	81,715,400	275.51	46.46	39.75
Nevada	3,477,999	2,080,800	2,579,723	4,981,000	9,641,523	167.15	46.00	36.07
New Hampshire	8,993,193	5,895,600	8,672,294	18,754,000	33,331,894	152.54	32.78	26.98
New Jersey	120,514,973	137,332,800	88,072,482	254,767,000	480,172,282	87.75	35.15	25.10
New Mexico	8,905,612	2,774,400	6.103,401	8,575,000	17,452,801	320.99	60.67	51.03
New York	373,023,880	946,764,000	261,086,683	852,888,000	2,060,738,683	39.40	33.49	18.10
North Carolina	45,083,161	277,093,200	35,973,065	64,128,000	377,194,265	16.27	45.04	11.95
North Dakota	20,186,688	3,814,800	7,143,584	27,769,000	38,727,384	529.17	57.82	52.13
Ohio	162,504,219	169,932,000	61,650,086	314,206,000	545,788,086	95.63	43.24	29.77
Oklahoma	38,388,399[1]	28,437,600	25,761,000	65,967,000	120,165,600	134.99	41.85	31.95
Oregon	25,548,945	10,057,200	23,784,858	45,403,000	79,245,058	254.04	36.93	32.24
Pennsylvania	196,950,196	264,608,400	139,293,381	361,135,000	765,036,781	74.43	39.36	25.74
Rhode Island	14,051,211	17,680,800	15,446,526	26,421,000	59,554,326	79.44	33.56	23.59
South Carolina	19,157,555	10,750,800	18,427,317	29,778,000	58,956,117	178.20	39.74	32.49
South Dakota	17,767,131	4,161,600	12,123,166	32,461,000	48,745,766	426.93	39.85	36.45
Tennessee	27,637,386	27,744,000	26,954,276	47,517,000	102,215,276	99.62	37.11	27.04
Texas	93,538,770	64,158,000	75,068,453	130,764,000	273,990,453	145.79	44.58	34.14
Utah	13,568,978	5,548,800	9,628,797	16,297,000	31,474,597	244.54	52.34	43.11
Vermont	6,986,021	3,814,800	8,603,612	10,788,000	23,206,412	183.13	36.03	30.10
Virginia	32,556,836	103,693,200	33,626,577	46,582,000	183,901,777	31.40	40.59	17.70
Washington	40,666,818	20,808,000	31,425,963	71,152,000	123,385,963	195.44	39.64	32.96
West Virginia	33,165,833	19,420,800	20,780,603	50,936,000	91,137,403	170.77	46.25	36.39
Wisconsin	65,154,476	47,511,600	48,416,384	137,937,000	233,864,984	137.13	34.96	27.86
Wyoming	7,469,177	1,734,000	3,986,336	9,505,000	15,225,336	430.75	55.36	49.06

Read table thus: In 1930, there was $19,074,000 collected in taxes by the federal government in the state of Alabama; $22,025,283 by the state government; and $32,937,000 by the local governments; making a total of $74,036,283 collected in taxes in this state. Expenditures for public schools in Alabama in 1930 were $28,420,601 or 149.00 percent as much as the taxes collected by the federal government; 51.71 percent as much as taxes collected by the state and local governments; and 38.39 percent as much as taxes collected by federal, state, and local governments. Similarly read figures for other states.

Sources of data: The figures of Column 2 are from U. S. Department of Interior, Office of Education, Bulletin 1931, No. 20, Chapters II, IV, and V. Figures representing collegiate cost are receipts rather than expenditures. Expenditures for these institutions are not available. In this table it is assumed that all school expenditures are paid from tax revenue. This is not strictly correct. A small percentage of school money comes from other sources than tax collections. A full evaluation of this fact, however, would not radically revise the relationship of the major items given in this table. The total figures for the United States as to amount of taxes collected by the federal, state, and local governments, are those of the National Industrial Conference Board as given in Table 24, p. 77 of *Cost of Government in the United States, 1929-30.* Total federal taxes were distributed among the states on the basis of the percent of federal taxes collected in each state as given in Table 34, p. 103-4 of *Cost of Government in the United States, 1929-30.* Figures as to taxes collected by state governments in the various states are from U. S. Department of Commerce, Bureau of Census. Figures as to amount of taxes collected by local governments in the various states are from Table 40, p. 114-5 of *Cost of Government in the United States, 1929-30.*

[1] Preliminary figure, Revised figure $40,337,850.

CHART V

PERCENT PUBLIC SCHOOL COSTS IS OF TOTAL TAX COLLECTIONS BY STATES, 1930

Research Division, National Education Assn.

Calculations based on figures of the National Industrial Conference Board and the U.S. Department of Interior, Office of Education.

School Costs and Certain Other Expenditures

Up to this point this *Bulletin* has been concerned with comparisons involving governmental income and expenditures. But, after all, only a small proportion of the nation's income is devoted to governmental operations. It is natural to inquire how the cost of schools compares with other large items of expenditure of the American people. To make such comparisons is the purpose of this section. Table 8 shows the estimated annual expenditures in the several states for public education, building construction, life insurance, and passenger automobiles. The same facts are shown graphically for the nation as a whole in Chart VI.

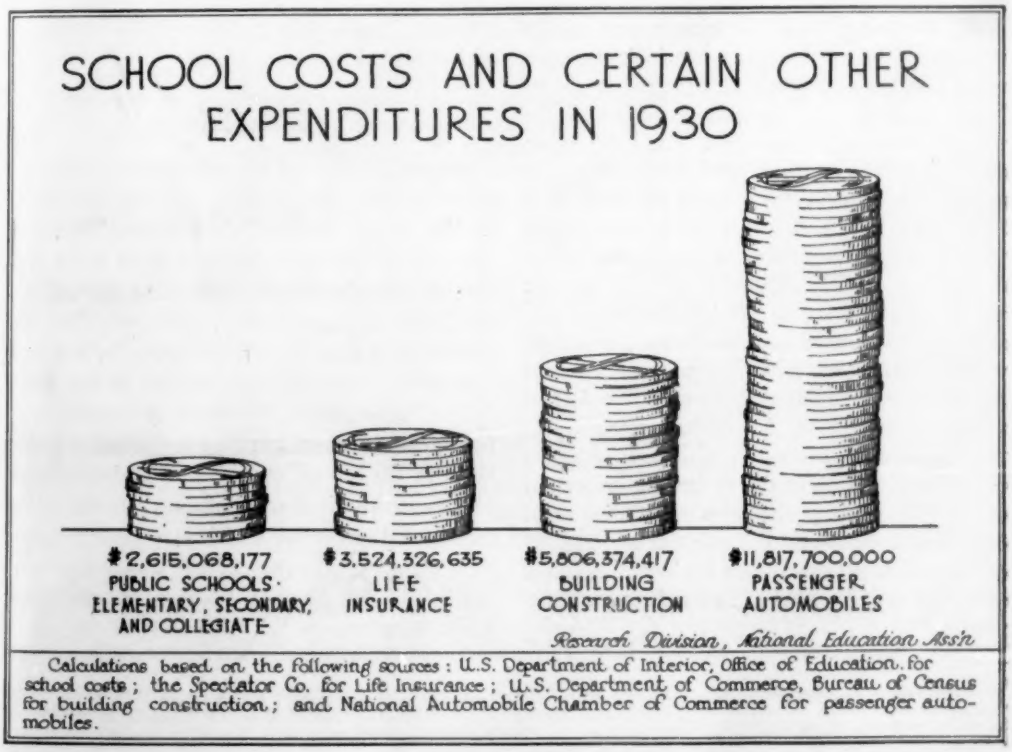
Life Insurance

The nation's payments for life insurance premiums in 1930 were $3,524,326,635. This figure may be compared with $2,615,068,177 expended for public schools of all types—elementary, secondary, and collegiate. The nation's annual bill for life insurance is, therefore, considerably larger than that paid for public education. Out of every $100 which we have to spend, we pay $3.35 for public schools and $4.52 for life insurance premiums.

In making this comparison there is no thought of depreciating the importance of life insurance. Life insurance constitutes one of the important forms of protection, saving, and investment. The fact that there were 32,776,335 ordinary life and 89,436,438 industrial life insurance policies in force in 1930, and that these policies protected the lives of the people of the nation to the amount of $107,948,277,730, is a reason for optimism. These figures indicate thrift and foresight on the part of the nation's citizens.

However highly we may rate the service rendered to the nation by the life insurance business, the question may be raised whether it is any more important than the service rendered by public education. The fact is that at present

CHART VI



Calculations based on the following sources: U.S. Department of Interior, Office of Education, for school costs; the Spectator Co. for Life Insurance; U.S. Department of Commerce, Bureau of Census for building construction; and National Automobile Chamber of Commerce for passenger automobiles.

we are spending $1.35 for life insurance for each $1.00 spent for public schools.

Building Construction

According to the U. S. Census of Construction, the nation's expenditures for construction of all types in 1929 was $5,806,374,417.[1] This figure is somewhat higher than $5,046,829,000, the value of building construction in 1930, as estimated by the F. W. Dodge Corporation on the basis of reports from thirty-seven states.[2] Either of these figures is approximately twice $2,615,068,000, the amount expended for public education in 1929-30.

Again, in making this comparison the desire is not to depreciate the importance of substantial investments in building construction. A well-constructed home, factory, or office building is serviceable for years. Expenditures for such structures when wisely made, constitute an important permanent investment. It would be folly to allow this portion of the nation's wealth to deteriorate. Such deterioration can be prevented only by making substantial expenditures to replace worn-out or out-of-date structures with modern ones.

In accepting these important and easily understood facts, let us not overlook the even more fundamental truth that the value of our human resources far exceeds the value of the wealth invested in buildings. The total value of all buildings in the United States is, at the present time, probably something less than $120,000,000,000. A recent estimate places the value of human resources of the United States roughly at $1,500,000,000,000.[3] To protect and enhance the value of that portion of this asset represented by our intellectual resources we spend $2,615,068,000 for public education. An investment of less than three billion dollars a year to protect our intellectual assets seems reasonable when compared with an investment of five billion dollars a year for the protection of material assets in the form of buildings and other construction. At any rate, for every $1.00 of our national income that we invest in public education we invest $2.22 in building construction.

Passenger Automobiles

Some look upon the automobile as a necessity of life; others call it a luxury. Both viewpoints are justified in some instances. Much of the money which we spend for passenger automobiles deserves to be considered as a wise investment. Some of it, no doubt, verges on extravagance.

But whatever allocation we may make of automobile expenditures under the head of necessities or of luxuries, who would say that it is more important to make full provision for all possible passenger automobile needs than for our educational needs? Yet we are spending several times more each year for automobiles than for all public schools. In 1930 there were 23,042,840 passenger automobiles in operation in the United States. We own 74.4 percent of all the automobiles in use in the world. Excluding motor trucks from consideration, we expended in 1930 approximately $11,817,700,000 for the purchase, upkeep, and operation of passenger automobiles.

The public school bill represents an investment of $3.35 out of each $100 of income; the passenger automobile bill claims $15.15 out of each $100 of income.

Luxuries

Since 1924 there have been no accurate reports covering the value of luxuries consumed by the people of the United States. Previous issues of the *Research Bulletin* have given the best estimates available concerning annual expenditures for such items as tobacco, chewing gum, soft drinks, etc.[4] Such estimates are not presented in this *Bulletin* because of the difficulty of determining the effect of current economic conditions on spending for luxurious purposes in the several states. The United States Census Bureau is now tabulating returns on its census of distribution which may yield reasonably accurate estimates of the amount of expenditures for various luxuries in the year 1929. The reports of collections of the new

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[1] The Census of Construction was taken as a part of the U. S. Department of Commerce Census of Distribution. It is the first official census of the construction industry that has been taken in the United States and, therefore, there are no figures for earlier years that are strictly comparable.

[2] Estimate quoted by the U. S. Department of Commerce in the *Commerce Yearbook, 1931*. Vol. 1, p. 325.

[3] Dublin, Louis I. *Health and Wealth*. New York: Harper & Bros., 1928. 361 p.

[4] Refer to: National Education Association, Research Division. "Investing in Public Education." *Research Bulletin* 8: 166-219, September, 1930. Washington, D. C.: the Association, p. 181.

TABLE 8.—ANNUAL EXPENDITURES FOR LIFE INSURANCE, BUILDING CONSTRUCTION, PASSENGER AUTOMOBILES, AND PUBLIC SCHOOLS, BY STATES, 1930.

States	Cost of public education, elementary, secondary, and collegiate	Expenditures for life insurance premiums	Expenditures for building construction	Expenditures for passenger automobiles	Percent school costs were of: Expenditures for life insurance premiums	Percent school costs were of: Expenditures for building construction	Percent school costs were of: Expenditures for passenger automobiles
1	2	3	4	5	6	7	8
United States	$2,615,068,177	$3,524,326,635	$5,806,374,417	$11,817,700,000	74.20	45.04	22.13
Alabama	28,420,601	29,604,344	49,364,722	122,310,000	96.00	57.57	23.24
Arizona	13,250,925	5,286,490	18,852,655	51,790,000	250.66	70.29	25.59
Arkansas	16,740,349	17,621,633	26,615,324	98,710,000	95.00	62.90	16.96
California	166,830,338	170,929,842	444,586,733	951,920,000	97.60	37.52	17.53
Colorado	29,398,832	27,489,748	33,162,570	138,680,000	106.94	88.65	21.20
Connecticut	37,791,163	66,962,206	148,380,327	151,860,000	56.44	25.47	24.89
Delaware	6,423,829	10,925,412	19,745,741	24,330,000	58.80	32.53	26.40
Dist. of Columbia	12,874,397	23,612,988	51,234,575	69,260,000	54.52	25.13	18.59
Florida	22,327,462	24,317,854	42,085,242	149,620,000	91.82	53.05	14.92
Georgia	22,677,010	42,644,352	42,979,103	155,860,000	53.18	52.76	14.55
Idaho	12,095,415	6,696,221	8,298,616	51,490,000	180.63	145.75	23.49
Illinois	166,692,471	323,885,618	494,672,914	741,100,000	51.47	33.70	22.49
Indiana	73,398,934	84,231,406	124,421,346	372,670,000	87.14	58.99	19.70
Iowa	61,650,851	56,741,659	79,318,030	338,570,000	108.65	77.73	18.21
Kansas	45,799,743	35,595,699	51,632,124	259,050,000	128.67	88.70	17.68
Kentucky	28,893,056	39,824,891	53,192,660	145,790,000	72.55	54.32	19.82
Louisiana	25,081,991	30,309,209	41,089,167	121,060,000	82.75	61.04	20.72
Maine	12,942,258	20,793,527	24,477,419	78,740,000	62.24	52.87	16.44
Maryland	30,133,310	52,864,899	93,145,700	144,310,000	57.00	32.35	20.88
Massachusetts	90,382,569	168,462,813	209,008,006	389,800,000	53.65	43.24	23.19
Michigan	137,738,439	126,523,326	316,627,185	587,300,000	108.86	43.50	23.45
Minnesota	64,682,845	64,847,610	73,455,813	309,930,000	99.75	88.06	20.87
Mississippi	22,162,443	17,974,066	20,845,706	102,420,000	123.30	106.32	21.64
Missouri	63,197,241	106,787,097	132,997,000	332,920,000	59.18	47.52	18.98
Montana	15,698,704	9,515,682	17,439,729	56,150,000	164.98	90.02	27.96
Nebraska	32,485,544	31,014,074	36,086,454	181,800,000	104.74	90.02	17.87
Nevada	3,477,999	1,409,731	4,997,032	12,550,000	246.71	69.60	27.71
New Hampshire	8,993,193	13,392,441	26,492,892	48,560,000	67.15	33.95	18.52
New Jersey	120,514,973	153,660,641	344,168,695	384,480,000	78.43	35.02	31.34
New Mexico	8,905,612	3,524,327	9,422,060	37,220,000	252.69	94.52	23.93
New York	373,023,880	697,816,674	1,040,313,689	1,055,280,000	53.46	35.86	35.35
North Carolina	45,083,161	43,349,218	49,964,271	199,180,000	104.00	90.23	22.63
North Dakota	20,186,688	8,458,384	16,635,212	77,870,000	238.66	121.35	25.92
Ohio	162,504,219	225,909,337	353,582,370	789,120,000	71.93	45.96	20.59
Oklahoma	*38,388,399	33,128,670	57,579,322	246,810,000	115.88	66.67	15.55
Oregon	25,548,945	22,908,123	34,014,382	121,520,000	111.53	75.11	21.02
Pennsylvania	196,950,196	334,106,165	493,966,463	785,660,000	58.95	39.87	25.07
Rhode Island	14,051,211	28,194,613	36,967,800	61,960,000	49.84	38.01	22.68
South Carolina	19,157,555	20,793,527	27,852,650	96,310,000	92.13	68.78	19.89
South Dakota	17,767,131	9,515,682	13,300,478	91,840,000	186.72	133.58	19.35
Tennessee	27,637,386	43,349,218	65,286,316	167,850,000	63.76	42.33	16.47
Texas	93,538,770	77,535,186	215,179,848	588,210,000	120.64	43.47	15.90
Utah	13,568,978	9,872,321	16,199,420	48,250,000	137.50	83.76	28.12
Vermont	6,986,021	9,863,909	15,191,390	39,950,000	70.79	45.99	17.49
Virginia	32,556,836	44,054,083	50,460,760	164,260,000	73.90	64.52	19.82
Washington	40,666,818	42,996,785	79,573,940	196,370,000	94.58	51.11	20.71
West Virginia	33,165,833	28,547,046	38,193,400	112,890,000	116.18	86.84	29.38
Wisconsin	65,154,476	72,953,561	156,983,542	337,580,000	89.31	41.50	19.30
Wyoming	7,469,177	3,524,327	6,333,624	26,540,000	211.93	117.93	28.14

Read table thus: In 1930 there was $29,604,344 paid as life insurance premiums in the state of Alabama. Expenditures for public elementary, secondary, and collegiate schools in Alabama in 1930 were $28,420,601, or 96.00 percent as much as was paid for life insurance in that state. Similarly read figures for other states and for other columns.

Sources of data: The figures of Column 2 are from the U. S. Department of Interior, Office of Education, Bulletin, 1931, No. 20, Vol. II, Chapters II, IV, and V. The figures representing collegiate costs are receipts rather than expenditures. Expenditures for these institutions are not available. Figures as to life insurance are from Insurance Yearbook, 1931, the Spectator Co. Figures of Column 4 are based on those of the U. S. Department of Commerce, Bureau of Census, and are for the year 1929. The figures given as to cost of building construction in the United States include cost of school buildings, which is approximately $400,000,000 a year for public elementary and secondary schools. The percent which the cost of public education is of the cost of building construction will be slightly increased if the cost of school buildings is deducted from construction cost of all building construction. Figures as to expenditures for passenger automobiles are estimates based principally on figures from the National Automobile Chamber of Commerce, and include the cost of operation, maintenance, and depreciation for all passenger automobiles.

*Preliminary figure. Revised figure should read $40,337,850.

federal excise taxes on these luxuries will also furnish a basis for such estimates. If reasonably accurate figures on expenditures for various types of luxuries become available, such figures will be reported in future issues of the *Research Bulletin*.

However, although no estimate of the expenditures by the people of the United States for luxuries is made at this time, it is a well-recognized fact that the cost of public education is only a fraction of the annual expenditures for articles commonly classed as luxuries. In 1928, the people of the United States spent about $2.61 for candy, chewing gum, theatres, and similar luxuries for every dollar spent for schools. The bill for tobacco, alone, was very little less than the bill for schools.

Caution must be exercised in comparing expenditures for public education with those for other purposes. It must be remembered that there is no economic magic whereby factories built for the production of certain types of commodities and services can be converted overnight into schoolhouses. The presentation of figures concerning school costs, and the costs of other goods and services, does not reject this sound economic principle. Nevertheless, it can hardly be denied that there is a large element of choice in the distribution of the available national income. There is scarcely a community in the country which, if it wished to forego the purchase of other goods and commodities, could not increase its expenditures for education. Similarly, most communities could reduce their expenditures for public schools and spend the money in other ways. If the proper support of public education is once recognized as a matter of primary concern, the schools will be adequately supported even though we may not at once have as much as we would like of material luxuries and comforts. In the long run, expenditures for schools return high dividends from the increased productive ability and general intelligence of the people. A wisely planned social and economic order will provide ways and means by which the economic resources devoted to various commodities and services will bear a close relationship to the relative social and human values of these commodities and services.

EDUCATION has a capacity for consumption which is wholly unlimited and wholly beneficent if wisely used. It is the finest possible solution to the unemployment problem. It should result only in better and better government and in the spread of finer and happier living, for much of our misgovernment is due to the misinformation of the voter, and much of our misery to his sheer ignorance. There should be no saturation point whatever to the demand of the public for education if the total economic situation permits it. Further, if the education, whether of youth or of adults, is wisely done, its results should be cumulatively good. A better and better educated electorate should mean better and better government and ever-increasing sanity and happiness in the living habits of the people.—*Robert A. Millikan, California Institute of Technology.*

Recent Trends in School Costs

The cost of public elementary and secondary schools in 1914 was $555,077,000. In 1930 the corresponding figure was $2,320,776,000—an increase of $1,765,699,000 or 318 percent. These three factors are primarily responsible for this increase:

1. Depreciation of the dollar.
2. Longer terms and increased attendance.
3. Improvements in educational service.

Each of these factors should be given its due weight in considering reasons for recent increases in school costs. An approximate analysis of the influence of these three factors is attempted in Table 9.

Depreciation of the Dollar

It is a well-known fact that the purchasing power of a dollar or any other sum of money varies from year to year. Since this is true, the dollar is not an eternally fixed basis of comparison but a shifting standard whose changes must be known and allowed for. If the purchasing power of the dollar in 1914 be taken as a standard, we find that it steadily decreased in the years immediately following 1914, until 1920. In 1921-1922, it rose sharply, but briefly, and the general trend between 1922 and 1928 was again downward. It had not reached its previous low level of 1920, however, when it began a new upward movement which has continued to the present. In spite of this recent upward trend, a dollar in 1930 was still worth only about 63 percent as much as it was worth in 1914. In other words, it cost approximately $1.59 in 1930 to buy as much as a dollar would buy in 1914.

Obviously these fluctuations must be considered in any year-to-year cost comparisons. The 1930 school bill of $2,320,776,000 represents only $1,460,526,117 in the money of 1914. That is, it would have cost only about $1,460,526,117 to operate the schools of 1930 in 1914, providing for all the changes that occurred in the intervening years in number of pupils attending school, and in the improved services rendered. The cost of operating the 1930 school program was thus about $860,249,883 more than the same school program would have cost in 1914. This difference is the result of an economic change which is entirely independent of the schools themselves. It does not represent an increase in school expenditures at all in any real sense of the word "increase." The fluctuations in the purchasing power of the dollar, therefore, as is shown in Table 9, account for $860,249,883 of the total increase in costs between 1914 and 1930. This sum is 48.7 percent of the total increase.[1]

Longer Terms and Increased Attendance

The schools of the United States were open, on the average, only 158.7 days in 1914. In 1930 the average term was 172.7 days. This is

[1] Of the total increase in school costs due to the depreciation of the dollar $326,940,353 is due to the decrease in the value of the dollar as it affects the cost of the 1914 program; $283,915,003 is due to the decrease in the value of the dollar as it affects the cost of the added attendance since 1914; and $249,394,527 is due to the decrease in the value of the dollar as it affects the cost of services added since 1914.

TABLE 9.—ESTIMATED CAUSES OF INCREASE IN SCHOOL COSTS, 1914-1930

Year	Cost of education	Increase over 1914	Amount of increase chargeable to			Percent of increase chargeable to			
			Depreciation of the dollar[1]	Increased attendance[2]	Other factors[3]	Depreciation of the dollar	Increased attendance	Other factors	All factors
1	2	3	4	5	6	7	8	9	10
1914...	$555,077,000								
1930...	2,320,776,000	$1,765,699,000	$860,249,883	$482,028,867	$423,420,250	48.72%	27.30%	23.98%	100%

[1] *Depreciation of the dollar*—$860,249,883. In 1930, $158.90 purchased the same amount that $100 did in 1914. Therefore, $2,320,776,000 purchased the same amount in 1930 as $1,460,526,117 did in 1914. The difference $860,249,883 ($2,320,776,000—$1,460,526,117) is due to depreciation of the dollar.

[2] *Increased attendance*—$482,028,867. Attendance increased 86.84 percent from 1914 to 1930. An increase of 86.84 percent over the cost of education in 1914 ($555,077,000) is $482,028,867.

[3] *Other factors*—$423,420,250. Depreciation of the dollar and increased attendance added $1,342,278,750. The difference between this amount and the total increase over 1914 ($1,765,699,000) is $423,420,250. This sum is chargeable to other factors.

an increase of 14.0 days, or 8.82 percent, in the average length of term provided by the schools.

The number of children which the schools served also increased during the same period. In 1914, there were 26,002,153 children in the United States between five and seventeen years of age; in 1930, there were 31,571,322. This is an increase of 21.4 percent in that portion of the population usually regarded as being of school age.

This population growth, however, is by no means the whole of the story. A larger proportion of these children went to school. In 1914, 19,153,786 children were enrolled in public elementary and secondary schools. In 1930, 25,678,015 children came to school. This is an increase of 6,524,229, or 34.1 percent in the number of children for whom the schools were required to provide instruction. Furthermore, those who enrolled attended more regularly. In 1914, each child enrolled attended on the average only 86.7 days out of each year, while by 1930 each enrolled child averaged 143 days' attendance per year. Here is an increase of 56.3 days, or 64.9 percent, in the brief period between 1914 and 1930.

The chief increases in enrolment have occurred in the high-school years. This increase in high-school enrolment is one of the greatest social movements in our history. In 1914, only 1,218,804 boys and girls were in American public high schools. In 1930, the number had reached 4,399,422, an increase of 261.0 percent.

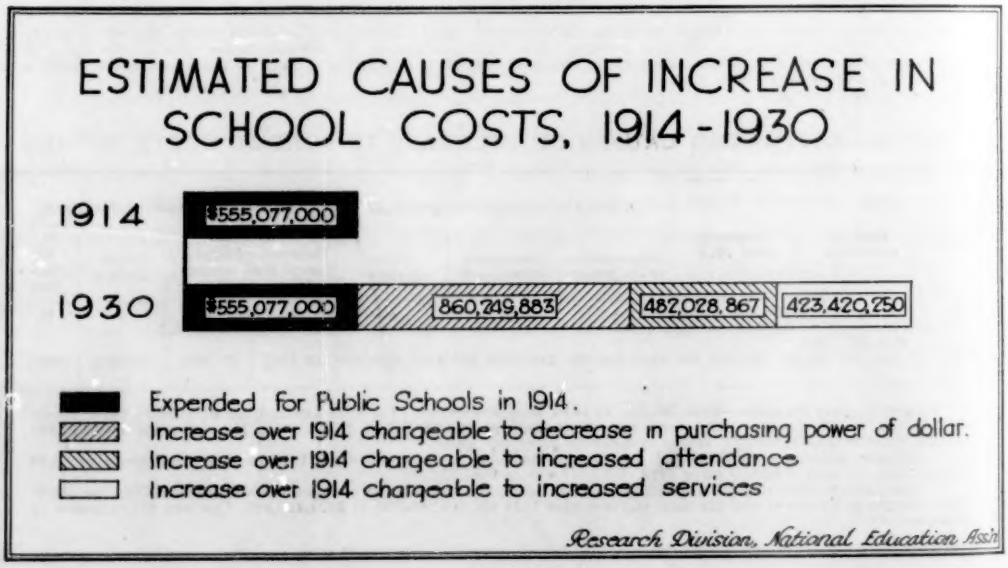
The effect of these increased enrolments, especially in the high school, and the better attendance of pupils enrolled during the longer school terms provided has been to add enormously to the size of the task entrusted to the schools. Between 1914 and 1930 the number of days' schooling provided for all pupils in public elementary and secondary schools increased from 2,255,657,000 to 3,672,765,000. The total number of days' schooling provided in elementary schools was 2,112,197,000 in 1914 and

TABLE 10.—INCREASES IN PUBLIC SCHOOL ATTENDANCE, 1914-1930

Items	1914	1930	Percent of increase
1	2	3	4
Children 5–17 years of age inclusive	26,002,153	31,571,322	21.4
Pupils enrolled in public elementary and high schools	19,153,786	25,678,015	34.1
Average daily attendance	14,216,459	21,264,886	49.6
Average length of school term	158.7	172.7	8.8
Enrolment in public high schools	1,218,804	4,399,422	261.0

Source of data: Figures from U. S. Department of the Interior, Office of Education, Bulletin, 1931, No. 20, Vol. II, Chapter II, Table 1.

CHART VII



3,043,620,000 in 1930, an increase of 932,625,000 days or about 44 percent, while the days of schooling provided in high schools increased from 143,460,000 to 629,145,000, or approximately 339 percent. The rate of growth in attendance at high school was thus more than seven times that in elementary schools.

The period from 1914 to 1930 has, therefore, witnessed an increase in (1) the number of children, (2) the number of children enrolled in school, (3) the regularity with which these children attend, (4) the length of school session available to them, and (5) the number of the high-school population. Table 10 shows the rapid rate of increase in these factors.

These increases in sheer quantity, by adding to the size of the task required of the schools, have necessitated increases in school costs.

As has been said, high-school attendance between 1914 and 1930 grew at a rate over seven times as rapid as the rate of growth in elementary-school attendance during the same period. This fact is particularly significant for a study of school costs, since education at the high-school level is more expensive than elementary schooling. Every day of schooling provided in the high school costs approximately two and one-half times as much as each day of elementary schooling. Therefore, in estimating the additional financial burden placed upon the schools due to increased attendance between 1914 and 1930, the *weighted attendance* for each of these years should first be calculated by counting as two and one-half days, each day of attendance in the high school.[1]

On this basis, the number of *weighted days' attendance* increased from 2,470,847,000 to 4,616,482,000 between 1914 and 1930, an increase of 2,145,635,000 days or 86.84 percent. Of this increase 931,423,000 weighted days or 43.4 percent took place in elementary-school attendance, while there was an increase of 1,214,212,000 weighted days, or 56.6 percent of the total increase, in attendance at high schools.

An increase of 86.84 percent in total days of schooling provided by the schools justifies a similar increase in school costs. Eighty-six and eighty-four hundredths percent of $555,077,000 is $482,028,867. This amount, shown as Column 5 in Table 9, is 27.3 percent of the total increase in school costs between 1914 and 1930. The increase in elementary-school attendance was responsible for $209,200,528 of this amount, while $272,828,339 was brought about by the growth in high-school attendance.

Improvements in Educational Service

Between 1914 and 1930 increased attendance added $482,028,867, and the depreciation of the dollar added $860,249,883 to school costs. These sums plus the cost of public education in 1914 gave a total of $1,897,355,750. The difference between this amount and $2,320,776,000, actually spent in 1930 for public elementary and secondary schools, or $423,420,250, is chargeable to the cost of added services and improvement in the quality of service rendered by the schools.

Teachers are better trained than in the pre-war period and merit higher salaries. The curriculum has been revised and extended to meet changing social needs. The great expansion of the high-school enrolment has greatly diversified the student body and necessitated various adaptations in the curriculum, methods, equipment, and personnel. Yet less than one-fourth of the total increase in school costs between 1914 and 1930, as is shown in Table 9, has been due to the cost of these added and improved services.

Table 9 shows that more than three-fourths (76.02 percent) of the increase in school costs between 1914 and 1930 has been traceable to causes other than the extension and improvement of the program. School officials can seldom limit the steadily increasing enrolments, nor can they control fluctuations in the value of the dollar. Only $423,420,250,[2] or 23.98 percent of the total increase, the amount due to the cost of added and improved services, has been in any degree subject to administrative control.

The facts presented by the figures of Table 9 are portrayed graphically in Chart VII. In any consideration of the increase in school costs since pre-war days, these facts speak for themselves.

[1] "It costs approximately two and one-half times as much to educate pupils attending high schools as pupils attending elementary schools. These facts became of great significance in atempting to determine the reasons for mounting costs in education."—Swift, Fletcher Harper. *A Biennial Survey of Public School Finance in the United States, 1920-1922.* U. S. Department of the Interior, Bureau of Education, Bulletin, 1923, No. 47. Washington, D. C.: Government Printing Office, 1923. p. 5.

[2] Even this amount is partly due to increased enrolments. Only $226,614,618, or 12.83 percent of the total increase between 1914 and 1930, would be needed to provide all the improvements in school service of the 1930 school program for the number of pupils who were enrolled in 1914. The remainder of the amount of increase due to added services, $196,805,732 or 11.15 percent of the total increase in school costs, is the cost of providing these services for the larger numbers of children coming to school, since 1914.

Summary of the Bulletin

The figures given in this *Bulletin* are based on the most recent and reliable estimates available. For the degree and methods of approximation involved, consult the text and footnotes of the preceding pages.

1. Need for facts—Present economic conditions make especially necessary the study of facts on the cost of public schools as related to certain other items.

2. National income and school costs—The cost of all tax-supported public schools is 3.35 percent of the national income. This percent is slightly higher than in previous years due primarily to decrease in the national income.

3. Income and school expenditures in the states—Fourteen states and the District of Columbia spend less than 3 percent of their income for the support of public education; eighteen states spend between 3 and 4 percent; and sixteen spend more than 4 percent.

4. National wealth and public school property—Slightly more than 2 percent of the national wealth exists in the form of school property. If public elementary and secondary schools alone are considered, less than 2 percent of the national wealth is thus invested.

5. Wealth and school property in the states—Only a minor part of the wealth of the nation is represented by its investment in public school grounds, buildings, and equipment. In no state does the value of public school property amount to as much as 4 percent of the total value of tangible property.

6. National income and government costs—Federal, state, and local tax collections amounted in 1930 to approximately 13 percent of the national income. Nearly half of the total tax collections were made for the support of local government.

7. Tax collections in the United States and other nations—The major European countries spend larger proportions of their national income for taxes than does the United States. In 1928 Great Britain spent twice as large a proportion of its income for government costs as did the United States.

8. School costs and other government costs—Annual expenditures for public education amount to approximately 25 percent of the taxes collected for all public purposes. Over 80 percent of all school support comes from property taxes levied in local jurisdictions.

9. School costs and expenditures for life insurance—Life insurance premiums claim $1.35 for each dollar spent for public schools.

10. School costs and expenditures for building construction—For each dollar of national income spent for public education we spend $2.22 for building construction.

11. School costs and expenditures for passenger automobiles—Our annual bill for the purchase and maintenance of passenger automobiles amounts to about five times as much as our annual bill for public schools.

12. School costs and luxuries—Although reliable estimates can no longer be secured, it is certain that the cost of public education is only a fraction of the annual expenditures for a few articles commonly classed as luxuries.

13. Recent trends in school costs—In the period 1914-1930, school costs increased 318 percent.

14. Causes of increase in school costs—The causes of increase in school costs since 1914, in order of their relative importance, are (*a*) the depreciation of the dollar; (*b*) increased attendance; and (*c*) improved services.

15. Depreciation of the dollar as a factor increasing school costs—Nearly half of the total increase in school costs between 1914 and 1930 may be accounted for by the decrease in the purchasing power of money.

16. Increased attendance as a factor increasing school costs—In the period 1914-1930, length of school term increased approximately 9 percent; the proportion of the population between five and seventeen years of age increased 21 percent; school enrolment below the college level increased 34 percent; and the regularity of attendance increased 65 percent. High-school enrolment considered separately increased over 250 percent. These increases account for over one-fourth of the total increase in school costs since 1914.

17. Extended services as a factor increasing school costs—The improvements and extensions in school services since 1914 have accounted for less than one-fourth of the total increase in the cost of public education. These improvements include the expansion and revision of the curriculum, great advances in libraries and other phases of school equipment, and a remarkable growth in the training and qualifications of teaching and administrative staffs.

Research Bulletin

OF THE

National Education Association

VOLUME X

January to November, 1932

The *Research Bulletin* is issued by the Research Division, a section of the headquarters staff of the National Education Association. This division was created in February, 1922, for the purpose of conducting scientific studies of special interest to members of the teaching profession.

Bulletin One was issued by the Research Division in June, 1922, and *Bulletin Two*, in November, 1922. The first number of the *Research Bulletin* is Volume I, No. 1, January, 1923, entitled "Facts on State Educational Needs." With Volume I, No. 1, the *Research Bulletin* became a regular publication, issued five times each year—January, March, May, September, and November. The *Research Bulletins* composing Volumes I, II, III, IV, V, VI, VII, VIII, IX, and X are listed on the inside back cover of the November, 1932, *Bulletin*.

RESEARCH DIVISION
THE NATIONAL EDUCATION ASSOCIATION
OF THE UNITED STATES
1201 Sixteenth Street Northwest, Washington, D. C.
1 9 3 2

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VOL. X, NO. 5 NOVEMBER, 1932

Research Bulletin

OF THE

National Education Association

NOV 3 - 1932

Facts on School Costs

PUBLISHED BY THE RESEARCH DIVISION OF THE

NATIONAL EDUCATION ASSOCIATION

1201 SIXTEENTH STREET NORTHWEST, WASHINGTON, D. C.

Research Bulletin of the National Education Association

Published five times each year in January, March, May, September, and November by the Research Division of the National Education Association of the United States.
President, JOSEPH ROSIER *Secretary*, J. W. CRABTREE

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Entered as second-class matter February 10, 1923, at the Post Office at Washington, D. C., under Act of August 24, 1912. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized February 10, 1923.

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ONE BODY of our citizenry remains immune from all blame and responsibility in the difficulties with which we are faced and must be held in special guardianship during the period of readjustment. I refer to the children . . . . Public machinery directed to the protection of childhood, such as public health, welfare agencies, educational systems, should be the last to be affected by measures of economy . . . . Let us everywhere be on guard against any retrenchment which pinches the young.—Walter S. Gifford, Director, The President's Organization on Unemployment Relief, November, 1931.