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A BIENNIAL SURVEY OF
PUBLIC SCHOOL FINANCE IN THE
UNITED STATES, 1920-1922

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[Advance Sheets from the Biennial Survey of Education
in the United States, 1920-1922]



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Every great war in which the United States has played a part has been followed by educational developments of supreme national importance. As the result of the Revolutionary War the Federal Government acquired a vast public land domain from which it has made generous grants to the States carved out therefrom, and which became the foundation of systems of free public schools in no less than 30 of our States. The constitutions drafted by one State after another following the Civil War are eloquent with evidences of a newly created faith in public education. Although the lapse of more than half a century still finds educational provisions in the South far from adequate, the fact remains that not only in the South but in the North the Civil War was followed by educational efforts and movements amounting almost to a renaissance.

Although the United States was engaged in the World War less than two years, the effects upon education resulting from this brief period of warfare will perhaps prove to be as far-reaching and as important as those growing out of any previous war. For more than a quarter of a century educational leaders and men interested in our national welfare had been attempting to awaken the United States to the inadequacy of its educational provisions. The Federal census of 1910 and many National and State reports prepared thereafter had endeavored to awaken the intelligence and zeal of the citizens of the United States to the shocking extent of illiteracy, the failure of the States to make education universal, and the disasters awaiting American democracy if measures so inadequate were allowed to continue. But while State superintendents of schools spread broadcast their reports and appeals, and justified their ominous prophecies by the incontrovertible pronouncements of the Nation's greatest political thinkers from the beginning of our national existence to the present time, the people, or at least a large part of

that portion of the people which controls school levies, continued to point to newly erected urban school buildings, raised indignant protests at every suggestion of increasing school rates, and pleaded poverty and overtaxation.

There is little reason for thinking that affairs might not have continued thus indefinitely had not the World War finally extended its octopus clutch over the United States also. To be sure, social and educational leaders had labored courageously and with some success; but it was not until American Army officers found it necessary to have their orders shouted to American privates in three, four—yes, and even five—languages that America awoke, awoke to the fact that in a country whose laws, whose very ideals were written in English, thousands upon thousands of adult citizens could not read a single word of the language of their adopted country. The first selective draft showed that there were 700,000 illiterates in the United States between 21 and 31 years of age, and that 29 per cent of the total number of men actually examined were physically unfit for military service. Worse still, thousands upon thousands of children were discovered to be growing up amid conditions which debarred them from any chance of securing even the rudiments of an education.

The realization that came with this awakening was at first undefined and bewildered. Yet, although vague and confused, it was animate and pregnant with possibilities. It led at once to a demand that both the causes and the remedy be discovered. The causes were not difficult to determine. Indeed, as already indicated, they had been set forth again and again by the educational leaders of nearly every State in the Union. Briefly stated, they were these: Inequalities in educational opportunities, inequalities in zeal for public education, inequalities in taxable wealth from which school revenues were derived.

Even a most cursory survey of educational conditions in 1918, the last year of the war, will reveal ominous inequalities not only among our 48 States but among the counties and districts within the same State. Thus, whereas the State of Montana spent in that year over \$80 on each pupil attending school, Mississippi spent only \$12. Again, whereas the minimum legal school year in New York State and in Connecticut was nine months, in Arkansas it was six months and in South Carolina less than six months.

Undoubtedly the World War was the most important factor in awakening the American public to the inadequacy of its educational provisions and in arousing the States to vigorous efforts to improve educational conditions. However, in this connection mention should be made of a little volume put forth in 1918 by the Russell Sage Foundation, written by Leonard P. Ayres and entitled "An Index

Number for State School Systems." This was one of the first attempts yet made to assign an educational rank to each of the States in the Union. The effect produced by this volume, particularly upon the States ranked low by Ayres, can probably never be measured. One State after another, through its governor or other public leaders, was aroused to the inadequacy of its educational provisions. Investigations were demanded and made, to be followed by legislation providing longer school terms, increased salaries for teachers, and larger funds.

It must not be thought that the post-war wave of educational enthusiasm and the resulting efforts at improvement were confined to any one group of States or to States where educational standards were relatively low. On the contrary, the movement has extended from New York to Louisiana and from Maine to Washington. The fundamental characteristic of this movement has been a demand for greatly increased educational opportunities and for the equalization of these opportunities as nearly as possible. The realization that the fulfillment of such demands would be possible only through the provision of greatly increased revenues led one State after another, not only to provide larger funds but to endeavor to discover new sources of school revenue and methods and policies of school finance which would bring about a greater equalization than hitherto prevailed, both of funds and of the burdens of school costs.

From these preliminary observations we may now turn to consider more definitely the most important events and tendencies affecting public school finance in the United States during the biennium 1920-1922. Our account may well begin with a consideration of the increase in school costs and the reasons for the same. Following this we shall direct attention, first, to the trend of school finance policies, Federal, State, and local; second, to the results of these policies; third, to the present critical situation; and, fourth, to the outlook for the future.

GROWTH OF SCHOOL COSTS.

A study recently made by the research division of the National Education Association shows that 30 States whose aggregate total expenditure for all school costs (except debt service) in 1920 was \$760,898,253 spent in the year 1921-22 \$1,117,129,569, an increase of 46.82 per cent. A similar study by the writer of the present account, covering 11 States, 3 of which (Kansas, New Hampshire, and Tennessee) were not included in the National Education Association study, revealed an increase for the same period of approximately 46 per cent. The total amount expended for the public schools in the United States in the year 1920 was \$1,036,000,000. Assuming that the average increase in total expenditure for public schools

in the United States from 1920 to 1922 was 46 per cent, we find that the estimated expenditure for all public-school costs in the United States, exclusive of debt service, in the year 1922 would amount to approximately \$1,526,000,000. In the year 1870 the United States spent approximately \$63,000,000 on public schools, and assuming that in the year 1922 we spent \$1,526,000,000, we have an increase of 2,322 per cent.

In 1890 our total expenditure for public schools amounted to \$141,000,000; in 1900, to \$215,000,000; in 1910, to \$426,000,000; and in 1920, to \$1,036,000,000. The moneys spent for public schools in 1920 represent an increase of 36 per cent over the amount spent in 1918, and the estimated total expenditure in 1922 represents an increase of 46 per cent over 1920. These vast increases are the result of the interaction of many important factors—the rapid increase in school population, the lengthening of the school year, the placing by the community upon the school of a larger and larger number of functions, resulting in the introduction of many new types of studies and activities, and finally and, we may note, as far as the biennium 1920-1922 is concerned, perhaps the most important cause of all, the increase in the cost of living and the consequent decrease in the purchasing power of the dollar.

The first of the above causes which concerns us is the enormous increase in the number of children for whom the United States is providing public elementary and secondary education and the great increase in the amount spent for each school child educated at public expense. The fact that the population of the United States increased from approximately 63,000,000 in 1890 to 106,000,000 in 1920 would in itself result in a great increase in the school population and school costs. In 1890 there were approximately 8,000,000 children in average daily attendance upon public schools in the United States; in 1920 there were 16,000,000. In 1890 the average annual expenditure for each child in average daily attendance was \$17; in 1920 it was \$65. The per cent of increase in the total expenditure for public schools, 1890-1920, was 711. For this same period the number of children in average daily attendance increased 98 per cent and the average annual expenditure per child 272 per cent. Let us now consider briefly some of the most important reasons contributing to this increase in school attendance and school costs other than the increase in the total population of the United States.

The number of children attending public school and, consequently, school costs have greatly increased during the last quarter of a century, due to the enactment of compulsory school laws and by the ex-

tension of the school age. In 1894-95, according to the Commissioner of Education, there were 19 States which had no compulsory school law. In 1920 there was not a single State in the Union which did not have included among its statutes a compulsory school law. It is scarcely necessary to add that the degree of effectiveness with which these laws have been enforced has steadily increased throughout the past 25 years, with the result that a larger and larger percentage of children of school age has been found within the public schools. Not only is this true, but a comparison of the compulsory school age in those States which in the year 1895 had a compulsory school law with the compulsory school age in these same States for the year 1918 shows that while in New Hampshire the compulsory school age had decreased two years and in New Mexico one year and in five States it had remained unchanged, in 18 States it had increased all the way from one to four years. In this connection attention should be called to the fact that the length of the average school year in the United States increased from 130 days in 1880 to 135 days in 1890 and 162 days in 1920.

Another factor which has played a large part in the increase of school costs in the United States is the multiplication of high schools and an unprecedented growth of high-school attendance. How important these factors are can be better understood by a comparison of what it costs to educate a high-school pupil with what it costs to educate an elementary-school pupil. In 1918 the average cost in the United States per elementary school pupil enrolled was \$31.65; per high-school pupil enrolled, \$84.48. It should be borne in mind that in 1918 the United States was in a period of retrenchment due to the World War, and although this period of retrenchment was by no means past in 1920, yet the expenditure per elementary pupil and per high-school pupil was approximately double that of the year 1918, being, in fact, \$64.03 per elementary pupil enrolled and \$158.21 per high-school pupil enrolled. From these facts we see that 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 attempting to determine the reasons for mounting costs in education when we discover that seven times as large a proportion of our total population was attending high school in 1920 as was attending high school in 1890. More specifically, in 1890 three-tenths of 1 per cent of the total population in the United States was enrolled in high school, whereas in 1920 2.1 per cent was enrolled. In the year 1890 approximately 3 persons out of every 1,000 individuals in the United States were enrolled in high school; in 1920 21 persons out of

every 1,000. The trend becomes even more impressive when we turn our consideration from the total population to that portion of it actually enrolled in school. In 1890, out of every 1,000 children enrolled in school, only 16 were in high school; in 1920, out of every 1,000 children enrolled, 102 were enrolled in high school. Finally, we discover that, whereas in 1890 the United States was spending \$4,759,065, in 1920 her expenditure on public high schools, excluding all cities of less than 10,000 population, and excluding also costs of administration, capital outlay, and debt service, was \$66,024,307.

In considering increases in school population and school costs which have marked the past quarter of a century, the fact must not be overlooked that no less than 10 States have been admitted into the Union since 1888. Four of these States were admitted in the year 1889 and the remaining six from 1890 to 1912. The rapid development of these new States, their growth in population, and particularly the fact that they came into the Union possessed with marked zeal for public education and vast Federal endowments stimulated them to establish and maintain high standards as to the accessibility and quality of the educational facilities they provided.

It is impossible in the present brief account to give the consideration merited by a number of other causes which, combined with those already mentioned, have steadily forced upward expenditures for public schools. Reference was made in a previous paragraph to the expansion of the course of study, to the development of vocational education and the establishment of continuation classes, and to the fact that a great number of new projects and new responsibilities have been assumed by the public schools. New conceptions of what our public schools must endeavor to do for the millions of children who, year after year, pass in and out of their schoolrooms have led to an expansion of the course of study and to the attempt on the part of our public schools not only to provide new types of instruction but to provide many types of physical care almost undreamed of by the directors of public education a quarter of a century ago. Some of the projects well-nigh unthought of at that time but which the public schools of to-day are undertaking are suggested by the following list: School doctors, nurses, dental clinics, psychological clinics, open-air schools, supervised play, special schools and classes for blind, deaf, crippled, and mentally backward or deficient children, truant officers, home visiting teachers, city systems of public kindergartens, extensive programs of physical and health education, free textbooks, and continuation classes for minors engaged in industry.

To these causes must be added three others: A steady rise in the educational and professional qualifications demanded of public-school

teachers, necessitating a steady increase in the salaries paid, and a similar continual rise in building and equipment standards. A final cause, and one which is frequently overlooked by the public, is the depreciation of the purchasing power of the dollar.

In 1913 the United States spent for public schools approximately \$522,000,000; in 1918, \$763,000,000; in 1920, \$1,036,000,000; and in 1922 (estimated), \$1,526,000,000. Taken by themselves, these expenditures for 1918, 1920, and 1922 indicate a vast increase over that of 1913, but if compared with the total expenditure for 1913 on the basis of the purchasing power of a dollar in these respective years, it will be found that in 1918 and 1920 they represent an actual decrease, as the following table shows:

TABLE 1.—Total expenditures for public schools in the United States.¹

Year.	Actual total expenditure (millions of dollars.)	Index of cost of living. ²	Purchasing power of total expenditure ³ (millions of dollars).
	A.	B.	C.
1913.....	522	100	522
1918.....	764	174	438
1920.....	1,036	200	518

¹ For all costs except debt service.

² Formula used in computing items in column C: $C = A \div \frac{B}{100}$.

³ Index figures taken from Nat. Educ. Assoc. Research Bul., Vol. I, No. 2, p. 84.

From Table 1 we see that the \$764,000,000 spent in 1918 had the power to purchase only what \$438,000,000 would have purchased in 1913, and that the \$1,036,000,000 spent on public schools in 1920 had the power to purchase only what \$518,000,000 would have purchased in 1913. In other words, in terms of the purchasing power of money, the United States spent \$84,000,000 less on public schools in 1918 than in 1913 and \$4,000,000 less in 1920 than in 1913. The inadequacy of the expenditure in 1918 and 1920 becomes even more evident when we discover that there were nearly 2,000,000 more children in average daily attendance in the public schools of the United States in 1918 than in 1913 and more than 2,500,000 more in 1920 than in 1913. It is easy to forecast that, however much the actual expenditure per school child in 1918 and 1920 exceeded that of 1913, in actual purchasing power the expenditure per pupil must have been considerably less. This statement is borne out by the facts presented in Table 2.

TABLE 2.—Decline in average annual expenditure per child as measured by purchasing power of the dollar, 1913-1920.

Year.	Index of cost of living.	Millions of children in average daily attendance.	Average annual expenditure.	Purchasing power of average annual expenditure.
			Per child in average daily attendance.	
1913.....	100	13.6	\$38.31	38.31
1918.....	174	15.5	49.12	28.23
1920.....	200	16.2	64.16	32.08

From Table 2 we see that although the United States spent in 1918 one and three-tenths times as much per school child as in 1913, and one and seven-tenths times as much in 1920, in actual purchasing power she spent \$10 less per child in 1918 and \$6 less in 1920 than in 1913.

With respect to teachers' salaries the facts and conditions are in complete harmony with those already presented regarding total expenditure and expenditure per child. The average salary of teachers in the United States was \$515 in 1913, \$635 in 1918, and \$837 in 1920. The purchasing power of these respective average salaries was \$515 in 1913, \$365 in 1918, and \$418 in 1920. (National Education Association, Research Bulletin, Vol. I, No. 2, March, 1923, p. 84.)

Even a cursory consideration of the facts presented in the last few paragraphs will show that if the States were to make any genuine progress it would be necessary for them to greatly increase their expenditures. Before the schools could be relieved of the large numbers of teachers whose preparation was in many cases not only meager but far below the minimum legal qualifications, and before communities could make any headway with their disastrously retarded building programs, money would have to be spent in rapidly increasing sums. That this is what actually took place during the biennium 1920 to 1922 is evident from the fact already noted that the expenditure for public schools in 1922 was 46 per cent in advance of the expenditure in 1920. Assuming as the total expenditure in the year 1922 the sum \$1,526,000,000, estimated as explained in a previous paragraph, we find that in 1922 the United States spent approximately \$490,000,000 more on public schools than in 1920 and more than three times as much as was spent in 1913. From 1920 to 1922 the index of the cost of living decreased from 200 to 170, with the result that \$1,526,000,000 had the power of purchasing what \$897,000,000 would have purchased in 1913. Thus we see that, whereas the actual purchasing power of the total amount of money

expended for public schools in 1918 and in 1920 was less than that expended in 1913, the purchasing power of the estimated total amount of expenditures on public schools in 1922 was one and seven-tenths times that spent in 1913.

A study of the expenditures of 14 States for the year 1921-22 showed that their aggregate total expenditure amounted to \$536,493,396. Of this total expenditure, 80.4 per cent was devoted to current expenses and 19.6 per cent to capital outlay, the largest item of which was new buildings. Contrast with this the fact that in 1890 only 18.6 per cent of total public-school expenditures were devoted to outlays; in 1900, 16.5 per cent; in 1910, 16.41 per cent; and in 1920, 14.8 per cent. It is evident that no small part of the unprecedented increase in school costs during the year 1922 was due to greatly increased building outlays. This is a matter of sufficient importance to demand somewhat further consideration.

BUILDING EXPENDITURES.

The general building situation is set forth in the following statement from a recent bulletin issued by the Bureau of Education:

Even before our entry into the World War there was lack of adequate school accommodations in the country and with the almost total stoppage of construction during the war there was by the end of 1920 a widespread want.

This general statement might be supported by quotations from the official school reports of nearly every State in the Union. The annual report of the Maryland State Board of Education, 1920, page 33, contains the following significant statement:

Building operations throughout the State were practically suspended with our entry into the war in 1917, and, on account of the cost of labor and materials, were not fully resumed during 1920, although 10 per cent of the total school expenditures in the counties was devoted to capital outlay or debt service. In normal times a school system usually devotes about 20 per cent of its total expenditure to building purposes, the remainder to current expenses.

Let us take two other examples, New Hampshire and Massachusetts. In 1906, 1907, and 1908 Massachusetts devoted approximately from 18 to something over 19 per cent of her total school expenditures to outlays. In 1917 the per cent had fallen to 14.36; in 1918, to 12.9; and in 1921, to 8.9. In 1922 her expenditure for outlays continued far below normal, being, in fact, only 9.8. New Hampshire devoted only 3.4 per cent of her total public school expenditures to building costs in 1918, 3.6 per cent in 1920, and 4.6 per cent in 1922. But while individual States, such as Massachusetts and New Hampshire, were still in 1920 and 1922 far behind in the per cent of their total expenditures devoted to building programs, from such data as are available it seems safe to assume that the majority of the States

were making genuine progress in catching up with their building needs. Thus we find that in 1920 Florida devoted 14.8 per cent of her expenditures to outlays; Tennessee, 15.7 per cent; Minnesota, 20.5 per cent; Nebraska, 13.8 per cent; Kansas, 14.3 per cent; Idaho, 23.3 per cent; and Nevada, 13.2 per cent. In 1922 Maryland devoted 17.6 per cent of her total expenditures to outlays; Florida, 12.3; Tennessee, 12.6; Minnesota, 25; Kansas, 17.2; and Washington, 17.4. One of the greatest obstacles in the way of carrying out building programs was the failure of many bond issues to attract buyers. This situation might be met by offering higher rates of interest or by selling bonds below par. One of the most interesting and significant building policies inaugurated during the biennium 1920 to 1922 was that provided for by North Carolina by an act passed March 17, 1921. This act provided for a State bond issue of not over \$5,000,000, the proceeds to be used for establishing in the State treasury a special building fund to be loaned to county boards of education to aid in the erection of schoolhouses. The law provided that no loan shall be made for a building of less than five rooms and that plans for buildings must have the approval of the State superintendent of public instruction.

Despite the increase in school expenditures for 1922 and the increase in the per cent of the total expenditures devoted to school buildings, the present writing finds school accommodations, taking the United States as a whole, far from adequate. A bulletin prepared by the Bureau of Education for American education week, December 3 to 9, 1922, reads, in part, as follows:

Probably never in the history of this country has there been such need for school building construction as at the present time. Lack of adequate school building accommodations in the period before the war and the almost total stoppage of all school building during the war have brought about a state of school-building congestion that is a menace to the health, strength, and intelligence of the children of this country. From the data that the bureau has been able to gather it is reasonable to assume that at least one-half the children of the country are housed in buildings nearly one-quarter of a century old. This means that more than one-half the children are housed in buildings that have practically none of the educational facilities of a modern school plant. Furthermore, these buildings are not fireproof, as it has been found that only 5 per cent of the total number of buildings in cities of 8,000 and over are of fireproof construction. About 10,000,000 of the 21,462,133 children in the country have inadequate housing facilities, and this is doubtless an underestimate. This means that it would be necessary to erect immediately 250,000 classrooms at a minimum cost of \$3,000,000,000.

This is a sum approximately three times that of the total amount expended for all public-school purposes in 1920.

We have now considered two of the major aspects of public-school finance characterizing the biennium 1920 to 1922, namely, (1) the

increasing costs of public schools and (2) the reasons for the same. Let us now turn to the third aspect of the situation, namely, the financial policies and tendencies characterizing this period.

FEDERAL POLICIES IN PUBLIC SCHOOL FINANCE.

Of the policies characterizing public education in the United States during the past 10 years, perhaps none has attracted more universal attention than that of Federal aid. The Smith-Lever Act, providing Federal subventions for extension work in agriculture and home economics, was approved May 8, 1914. On February 23, 1917, the Smith-Hughes vocational education law was passed, which marked the entrance of the Federal Government upon a national policy of subsidizing vocational education. This law was followed by the Smith-Sears Act, approved June 27, 1918, and the Smith-Bankhead Act, June 2, 1920; the former provided funds for the vocational rehabilitation of disabled soldiers and sailors, and the latter funds for the vocational rehabilitation of civilians disabled in industry or otherwise.

The most notable development within the field of Federal aid during the past biennium has been the attempt to induce the National Government to enter upon a policy of large Federal aid to public schools. This attempt found expression in 1918 in the Smith-Towner bill. This bill attempted to place upon the Federal Government the responsibility of evening out educational inequalities existing among the States by reason of their inequalities in financial resources, differences in educational history and in standards. It recognized that the Nation was confronted by an unprecedented or, at least, a heretofore unrecognized problem. It provided for the creation of a Federal department of education and for an annual grant from the Federal Government of \$100,000,000 for (1) equalizing educational opportunities, (2) reducing illiteracy, (3) Americanization work, (4) teachers' training, (5) physical education and recreation. In each case the amount furnished by the National Government was to be matched by the State. The Smith-Towner bill failed of passage and was succeeded by the Towner-Sterling bill, which attempted to embody in revised form the major aims and principles of the Smith-Towner bill, but which, like its predecessor, failed to pass. The bitter conflict waged about the Smith-Towner and the Towner-Sterling bills shows clearly that any attempt to inaugurate a policy of large Federal aid to public schools will meet bitter and well-organized opposition. What the future has in store no one would venture to prophesy. If these bills have served no other purpose, they have at least forced the citizens of the United States

to a realization of the national importance of education and to an appreciation of the fact that the educational conditions in one State are the concern of all.

The most important current funds at present provided by the Federal Government the proceeds of which are devoted at least in part to public schools include the following: Per centum grants, Smith-Hughes subventions, Federal forest-reserve county funds, and moneys derived from the Federal mineral royalty grant of 1920. To this list may well be added Smith-Lever subventions, for although not a dollar of Smith-Lever money reaches the public schools, the work is carried on partly among children of school age. A complete account of these funds will be found in a bulletin recently issued by the Bureau of Education on Federal Aid to Public Schools (Bureau of Education, Bulletin, 1922, No. 47). It will therefore suffice at this point to give these funds only a brief consideration.

Per centum grants, or funds, have their origin in the policy adopted by Congress upon the admission of Ohio into the Union in the year 1802, of granting to public land States a certain per cent of the proceeds of the sales of lands belonging to the United States sold after the State's admission to the Union. These grants are made on condition that no taxes of any kind shall be levied by the State upon lands sold by the Federal Government for a period of five years after the date of the sale. Up to June 30, 1920, the United States had paid in aggregate to the States entitled to per centum grants no less than \$16,792,261.

Chapter 192 of the Acts of Congress, May 23, 1908, provides that hereafter 25 per cent of all moneys received from each forest reserve during any fiscal year shall be paid to the State or Territory in which said reserve is situated, to be expended as the State or Territorial legislature may prescribe for the benefit of public schools and public roads of the county or counties in which the forest reserve is situated. Twenty-nine States contain national forest reserves in areas varying all the way from approximately 19,000,000 acres in California to 18,000 acres in South Carolina. The income is derived chiefly from the sale of forest reserve timber and from fees paid for grazing rights. The Federal forest reserve moneys paid to the States and to Alaska amounted in 1920 to \$1,180,065; in 1921, to \$1,023,082; in 1922, to \$846,443. The aggregate amount of Federal forest reserve moneys paid by the United States from 1906 to 1922 was \$11,149,092.

During the year 1920 Congress passed an act entitled "An act to promote the mining of coal, phosphate, oil, oil shale, gas, and sodium on the public domain." This act, approved February 23, 1920, provides that public land States in which are situated Federal lands con-

taining nonmetallic mineral deposits of the classes covered by the act, are entitled to 20 per cent for past production and to 37½ per cent for future production of the moneys paid to the United States as bonuses, royalties, and rentals from the lease of such lands, providing that all moneys accruing to the United States from land within the national petroleum reserve shall be deposited in the United States Treasury as miscellaneous receipts.

The oil and mineral leasing act is of special interest in view of the fact that it is the most recent grant of its kind. Because of the nature of the grants provided, it follows that this act will affect only a limited number of States, and of this limited number it would seem probable that only a few will receive any very important income. The General Land Office reports that eight States received grants under the terms of this act during the fiscal year 1921 and nine States during the year 1922. The total royalties paid during the fiscal year 1921 amounted to approximately \$10,373,000, and during the year 1922 to \$7,337,000. During the year 1921 the United States distributed \$1,806,805.96 among eight States, as follows: California, \$777,061.32; Idaho, \$37.50; Louisiana, \$199.58; Montana, \$43,168.12; New Mexico, \$78.75; North Dakota, \$16.97; Utah, \$300; and Wyoming, \$985,943.80. It is evident that the grants paid to the eight States were of negligible importance except in the case of California, Montana, and Wyoming. California has enacted that the entire proceeds received by the State shall constitute a current fund to be known as the State junior college fund for the maintenance of junior colleges, provided that any excess not required for this purpose shall be devoted to elementary schools. Wyoming has provided that 50 per cent of her quota shall be devoted to teachers' salaries, 10 per cent to the University of Wyoming for the construction, equipment, and furnishing of new buildings and for repairs, 38 per cent to the State highway commission for road construction, and 2 per cent to each county in proportion to the oil and gas production of the same. According to a statement in the Wyoming Educational Bulletin of June, 1922, the Government royalty fund amounted on April 30, 1922, to \$1,148,000. It was estimated that the distribution would amount to approximately \$250 per elementary and rural school teacher and \$375 per high-school teacher.

The interest of this act lies not only in the large grants received under it by California and Wyoming but also in its possibilities, for, should nonmetallic mineral deposits of great value be discovered in any of the public domain, they would thus become an important source of revenue to the State in which they were situated.

The passage on February 23, 1917, of the Smith-Hughes Act marked the entrance of the Federal Government upon an entirely

new educational policy. By the passage of the Morrill Act the Federal Government had begun as long as 1862 subsidizing industrial and agricultural work, but with the Smith-Hughes Act, "the Federal stimulus passed from the colleges to the public schools." This act provides subventions for the salaries of teachers, supervisors, and directors of agriculture, home economics, trade and industrial subjects, and for providing professional training for teachers of these subjects. Two hundred thousand dollars per year is devoted to the support of the Federal Board of Vocational Education created to carry out the provisions of this act. The general provisions of the act are too widely known to require any statement here. The Smith-Hughes Act provided for an annual Federal grant increasing from a total of \$1,860,000 in 1917-18 to \$7,367,000 in 1925-26, which amount thereafter becomes a continuing annual appropriation. The total amount provided under the Smith-Hughes Act in 1921 was approximately \$3,800,000 and in 1922 \$4,300,000. The results of this act upon vocational education are, in part, suggested by the following facts: In 1916 only two States in the Union—Wisconsin and Pennsylvania—had compulsory part-time or continuation school laws; in 1922 at least 21 States had such compulsory part-time education laws. The enrollment in Federally aided vocational schools increased from 164,186 in 1917 to 323,028 in 1921. The number enrolled in Federally subsidized teacher-training courses increased from 6,589 in 1918 to 13,358 in 1921.

In 1921 the United States provided under the Smith-Lever Act, \$5,080,000 to be distributed as subventions among the States for the support of extension work in agriculture and home economics. The amount thus provided in 1922 was \$5,580,000. As already noted, a portion of these moneys are available for work among children of public school age.

In addition to the funds thus far described, the United States makes annual appropriations to provide (1) approximately one-half of the costs of public schools in the District of Columbia, (2) to maintain schools for natives in Alaska, and (3) to pay the costs of the education of Indians in Oklahoma attending public schools and of the education of Indians in Federal schools. The sum provided by the Federal Government for the District of Columbia amounts to about \$2,000,000 per year and the appropriations for schools for natives in Alaska to approximately \$200,000 per year. In 1922 the United States paid to the public schools of Oklahoma \$197,932 for the tuition of Indian children attending public schools and \$372,000 for the education of Indian children in Federal schools.

A review of the preceding paragraphs dealing with Federal aid will show that during the biennium 1920-22 the United States

embarked upon no new policy of importance. The Smith-Towner and Towner-Sterling bills both represent a growing national educational consciousness, but, as already noted, both of these bills failed to pass. The Federal royalty mineral grant, thus far at least, affects too few States to be considered of far-reaching importance.

STATE POLICIES IN PUBLIC SCHOOL FINANCE.

In marked contrast to the situation just described with respect to the Federal Government is that which we find developing among the States during the biennium 1920-1922. During this period one State after another increased its school year and the age of compulsory school attendance, provided for the establishment of continuation classes for minors engaged in industry, established Americanization classes, entered upon campaigns against illiteracy, and sought to promote on a large scale other projects. Increased aid for high schools, for the promotion of consolidation, for the provision of free textbooks, for vocational education, and for health education and physical recreation are among the projects which have engaged, to a marked degree, the attention of the States. No less important than the tendencies just listed is that of establishing a legal scale of minimum wages for teachers, or of raising previously established minima. It will be seen that these projects and these policies all played an important part in the marked increase in school expenditures which took place in 1922 and which has already been noted.

Even more important than the individual undertakings and policies just noted is the question of the general trend. Taking the United States as a whole, in 1890, 23.75 per cent of the total receipts for public schools were derived from State sources; in 1905, 19.06 per cent; in 1920, 17 per cent. We see, then, that for the past three decades there has been a continual decrease in the per cent of total school costs furnished by the State. At present data are not available which will make it possible to determine whether, during the biennium with which the present account is concerned, 1920-1922, taking the United States as a whole, there was any marked change in this general trend of the diminishing relative importance of the State as a provider of school revenue. This, however, may be said; that although in some States the per cent of total revenues furnished by the State has declined during the past two years, in others there has been a definitely adopted policy to increase State aid, which has resulted in placing a much larger share of the burden of school costs upon the State than formerly.

It may be well to note at the outset one or two matters of importance. The first problem of public-school support is to furnish

adequate school revenues. Certain authorities at the present time are maintaining that the State ought to bear from 60 to 75 per cent of the total school costs. Such a condition may exist and yet the situation be very far from satisfactory. A number of Southern States have for many years drawn 50 per cent, or more than 50 per cent, of their school revenues from State sources, but this situation has been due to the fact that local school units have provided very meager funds, and consequently the total amount of revenue furnished was so small as to make impossible the maintenance of good schools.

A second matter of importance to be considered at this point is that the real test of what the State is doing is to be found not only in the amount of money it provides from State sources but also in the per cent of total school revenues which it furnishes. Thus, Minnesota in 1916 provided from State sources approximately \$5,035,000; in 1918, \$5,041,000; in 1920, \$6,382,000; in 1922, \$8,849,000; yet the per cent of total school expenditures provided by the State in these four years declined steadily, being, in fact, 23 per cent in 1916, 19 per cent in 1918, 16.6 per cent in 1920, and 15.7 per cent in 1922. From this brief presentation of two fundamental principles, let us now turn our attention to a few individual States which have recently made definite efforts to increase greatly the State's contribution to public-school support.

Among the States which since the close of the World War provided for greatly increased school revenue to be furnished by the State are Arizona, California, Georgia, Iowa, Louisiana, Massachusetts, New York, North Carolina, Pennsylvania, South Carolina, Texas, Utah, Washington, and West Virginia.

An act passed by the Arizona Legislature of 1921 provides for an annual levy sufficient to provide not less than \$25 per pupil in average daily attendance in common schools and high schools of the State as shown by the records of attendance for the preceding year. This provision displaces a law which provided for a levy sufficient to raise annually \$750,000. This new law resulted in the State providing \$1,254,325 in the year 1921-22, an increase of more than 66 per cent over the amount provided in the older law.¹

California in 1920 adopted a constitutional amendment whereby the State grant per pupil in average daily attendance was increased from \$17.50 to \$30 per elementary pupil and from \$15 to \$30 per high-school pupil. In 1890 the public schools of California derived 52 per cent of their revenues from the State; in 1920, 21 per cent. The constitutional amendment enacted in 1920 was a definite attempt to check this tendency of the State to bear a continually decreasing

¹ Bu. of Educ., Bul., 1922, No. 43, p. 11.

portion of the burden of school costs. It is estimated that had this amendment been in effect in 1921, the elementary schools of California would have derived 36 per cent of their support from State funds, and secondary schools 10.7 per cent of their support from the State. The counties in California must raise \$30 per pupil in average daily attendance in elementary schools and \$60 per pupil in high schools. All of the school moneys furnished by the State and 60 per cent of the moneys raised by the county must be devoted to the payment of teachers' salaries. This means a State minimum salary of from \$1,300, to \$1,400 per year.

The new school code of Georgia enacted in 1919 provided that, beginning with January 1, 1922, 50 per cent of all revenues received by the State from all sources of income or taxation shall be used and expended for the support and maintenance of common schools. Louisiana, by constitutional amendment adopted in 1920, provided an additional State tax of \$1,000,000. In the same year New York increased her appropriations for teachers' salaries to the extent of \$20,000,000. Few States in the Union show a greater tendency to recognize that the State must relieve the local school units of a much larger portion of the school burden than heretofore. Of the total revenue provided for public schools by New York, the State furnished 9.3 per cent in 1905 and 9.5 per cent in 1918. But in 1920 the State furnished 12.1 per cent, and in 1921 furnished 21.9 per cent. North Carolina increased her State appropriations for public schools from approximately \$750,000 in 1919 to \$3,295,000 in 1920.

Pennsylvania in 1921 passed a minimum salary law. All school districts of the State are classified as first, second, third, or fourth class. The salary act provides salary schedules for each class of school district. The State is required to pay districts which comply with the laws the following per cent of salary costs: First-class districts, 25 per cent; second and third class districts, 35 per cent; fourth-class districts, 50 per cent.

Texas in 1919 provided for an annual appropriation of \$2,000,000 to aid rural districts. The Texas Legislature of 1923 appropriated \$3,000,000 from the general revenue to supplement the State school fund. This will increase the per capita apportionment based upon pupils between the ages of 7 and 18 from \$10 to \$13.

Utah in 1920 adopted a constitutional amendment which permits a State school tax sufficient to provide annually an amount which, added to other State funds, will provide a sum equal to \$25 per school child. In the same year the State of Washington increased its State distributive fund from \$10 to \$20 per child of school age. The result of this was to increase the portion of total school costs borne by the State from 18 per cent in 1920 to 25 per cent in 1922.

Probably the most marked departure from traditional policies is to be found in Massachusetts. Possibly no other State pursued so long and so completely the policy of placing almost the entire burden of school support upon the local communities. The conviction that the State should assume little or no responsibility either for the direction or for the support of schools prevented Massachusetts from establishing a State permanent school fund until 1834. In 1915 Alabama, Mississippi, Montana, Delaware, Texas, and Kentucky each derived less than 50 per cent of their common-school revenues from the proceeds of local taxation; Massachusetts in the same year derived 97.2 per cent of her total school revenue from local taxation. In this form of support she long surpassed all other States in the Union. Again, Massachusetts leads the Union in the antiquity of this practice. Whereas local taxation for school support was not allowed in some States until well-nigh into the nineteenth century, and in some others, notably Alabama, not until the twentieth century (1901), Massachusetts permitted it as early as 1647 and in 1827 made it compulsory.

In the year 1919 Massachusetts frankly recognized the necessity of reversing her century-long policy and of placing upon the State a much larger share of school costs than in the past. This recognition was given practical expression by the passage of a law providing for the setting aside of a portion of the proceeds of the State income tax (created in 1916) as an annual current fund to be known as the general school fund. As the result of this legislation, whereas in 1915 the State had furnished only 1.82 per cent of the total public-school revenues, in 1920 she furnished no less than 12.3 per cent, and in 1921, 11.3 per cent. The creation of the Massachusetts general school fund was a definite recognition of a number of principles of far-reaching significance: (1) That the State must assume a much larger share of responsibility for equalizing school burdens and educational opportunities than in the past; (2) that this would necessitate the State providing a much larger share of the total school revenue than formerly; (3) that former sources of revenue were inadequate and that new sources must be found; (4) that a graduated State tax on personal incomes is an important and valid source of public-school revenue.²

In creating her general school fund Massachusetts was careful not to provide a fixed amount. On the contrary, the law requires that there shall be annually set aside from the proceeds of the State income tax an amount sufficient to subsidize the projects set forth in the act. In the year 1918 the State contributed \$1,113,000 toward

² For a full account of the Massachusetts general school fund, see Swift, F. H. "Public School Finance in Massachusetts," "Studies in Public School Finance, The East," Vol. II, University of Minnesota, Research Publications.

the support of public schools. In 1921 the general school fund alone contributed \$4,165,000, and the total amount contributed by the State for public schools, including vocational schools, was \$6,035,000. The income of the general school fund is to be used exclusively for the payment of salaries of superintendents, assistant superintendents, principals, supervisors, and teachers. The entire sum is paid out to the cities and towns of Massachusetts in reimbursements ranging from \$350 to \$150 for each school officer for whom the town or city is entitled to reimbursement from this fund.

A NEW CONCEPTION OF STATE AID.

A study of the history of school finance in the United States will reveal the number of different conceptions as to the purposes of State aid. The first State to create a permanent common-school fund was Connecticut, which did so in 1795. There is reason to believe that from the first the expectation in the minds of the legislators of Connecticut in establishing this fund was that the revenue should pay in full the wages of common-school teachers and so relieve the towns and school societies almost entirely from local taxation. The results of the Connecticut policy by which the responsibility of supporting schools was removed almost entirely from the local communities and thrown back upon the State could not have been foreseen by those who inaugurated this policy. Nevertheless, the evils soon showed themselves, and the school fund of Connecticut became notorious as an example of a magnificent endowment creating educational disaster. Of all the ills that followed the establishment of the Connecticut school fund, the most disastrous was its effect upon local taxation. The Connecticut School Code of 1700, which had continued in force until 1798, compelled every town to levy a local tax. The gradual increase of the income of the school fund was accompanied by an increase in disinclination to levy taxes, with the result that from 1821 to 1854 a local school tax was virtually unknown in Connecticut.

The lesson which Connecticut had learned at such a cost was not lost upon the other Eastern States. New York passed an act in 1812, three years prior to the first distribution of the revenue of her permanent common-school fund, requiring that in order to participate in the income of this fund the local community must raise by tax an amount equal to its share of the State fund. From this time on in a considerable number of the States the purpose of State aid was conceived to be twofold: First, to ease the burden of local communities; second, to stimulate local effort. In general, State aid was distributed among counties and districts on the basis of total population or school population. No attempt was made to recog-

nize differences in the ability of various communities to provide school revenues as represented by differences in valuation, or to recognize differences in effort as represented by differences in local school-tax rates. During the past few years, however, numerous reports and studies have pointed out the supreme importance of these factors, with the result that there has come into prominence a new conception of the fundamental purpose of State aid, namely, that of evening out the inequalities in school revenues and school opportunities existing among the various communities of the State and which in the last analysis are due to factors which the local communities frequently are unable to modify. As the result of this new conception, we find one State after another attempting to establish a State equalization fund or providing for the distribution of already existing funds upon a basis which will take into consideration differences in valuation and in tax rates—that is, differences in ability, need, and effort.

A few examples of this tendency must suffice. As long ago as 1913 Colorado provided for setting aside out of the income of her public-school fund a sum not to exceed \$60,000, to be paid to districts unable to derive from all other State, county, and district revenues a sum sufficient to pay each teacher employed in the district at least \$50 per month for six months. In 1919 the amount to be set aside from the income of the public-school fund was increased to \$150,000. In 1921 an act was passed which provides that the State superintendent of public instruction before apportioning any of the income of the public-school fund shall first apportion to any county in the State in which the maximum rate of county-school-tax (5 mills) shall be insufficient to provide funds to pay every public-school teacher within that county a minimum salary of \$75 a month, a sum sufficient to supply the amount of such deficiency. It will be seen that this act makes the entire income of the public-school fund available as an equalization fund, should the occasion arise.

It was in 1921 that the State of Maine passed a law providing that \$100,000 should be deducted annually from the State school fund to be used as a State equalization fund. The equalization fund is apportioned first for the sake of aiding towns whose aggregate attendance is small and which consequently will receive a small amount of help from that portion of the State school fund distributed on the basis of aggregate attendance. Whenever any school maintained by a town for the number of weeks of school provided for in said town fails to record at least 1,500 days' aggregate attendance, there shall be apportioned to the said town from the State equalization fund such sum as will give to said town an amount equal to that apportioned for 1,500 days' aggregate attendance. The State superintend-

ent of public instruction is allowed to grant to any town a sum not exceeding \$500 in any one year for the encouragement of consolidation, conveyance of pupils, housing of teachers, standardization of schools, or other projects especially worthy of encouragement. The State equalization fund may be used to provide special aid for a school which has been closed because of an epidemic, a fire, or other unpreventable causes and which on account of such reasons would not receive the amount of State aid from the State school fund to which it would otherwise have been entitled. The balance of the school equalization fund not apportioned as provided for by the preceding provisions shall be apportioned to towns wherein the rate of taxation is considerably in excess of the State average rate yet fails to produce a school revenue sufficient to secure a reasonable standard of educational efficiency.

In 1921 the State of Michigan passed an act providing for State grants designed to equalize school burdens. This act grants \$200 of State aid annually to any "primary school district" maintaining a one-room school nine months if its school maintenance tax for a seven months' school is 12 mills or more. A special appropriation is made to provide for the funds to carry out the provisions of this act.

In 1921 the Legislature of Minnesota passed an act which provided for an equalization fund referred to in the act as supplemental aid. This act provided that to any school district whose school maintenance tax lies between 20 and 32 mills the State shall pay as supplemental aid one-third of the excess above 20 mills. If the tax levy for maintenance exceeds 32 mills, then in addition to the above amount the State shall pay one-half of such excess above 32 mills. In school districts maintaining only ungraded elementary schools, if a 20-mill tax does not raise the equivalent of \$600 for each teacher employed at least seven months, then the State board of education may grant to such school district an amount which, together with the proceeds of a 20-mill tax, will provide \$600 for each teacher employed. The Minnesota Legislature of 1923 passed an act providing that supplemental aid shall be limited to school districts whose local maintenance levy exceeds 20 mills. When a local school tax of 20 mills fails to yield the equivalent of \$40 per pupil in attendance 40 days, the State pays the difference between the sum per pupil produced by the 20-mill tax and \$40 per pupil. The effect of this act is to establish the fund for supplemental aid as an equalization fund.

In 1920 Mississippi enacted two exceedingly important laws—a compulsory attendance law and a law providing for an increase in State appropriations. The State superintendent of public instruction states that the new compulsory attendance law resulted in bring-

ing into school 30,186 white children over 7 years of age who had never been to school before and that—

The common-school appropriation (through legislation of 1920) was increased 60 per cent and all the increase put into an equalization fund to be disbursed by the State board of education in such a manner as to equalize as nearly as possible school terms and teachers' salaries throughout the State.

REFORMS IN APPORTIONING STATE SCHOOL FUNDS.

Scarcely less important than the provision of adequate revenue is the apportionment of such revenue in accordance with methods which may be characterized as scientific, sound, equitable, and democratic. Regarding no problem in school finance is the public at large more in need of information. In no phase of school finance has progress been more slow and the practices most commonly employed more unscientific and less necessary.

A recent study showed that in no less than 37 of the 48 States school funds were distributed all or in part on the basis of school population, despite the fact that the unsoundness of this basis and the disastrous results produced thereby have been pointed out again and again. One of the most important purposes of State aid is to even out inequalities which arise among school units as the result of differences in wealth; that is, differences in ability to provide money for schools. A bad method of distributing State aid, instead of evening out such inequalities, creates, exaggerates, and perpetuates them. Many States in the Union by adopting a scientific method of distributing State aid could bring about immeasurable improvement in educational conditions without increasing State aid a single dollar. One of the most hopeful signs of the present era is a growing attempt on the part of the States to reform existing methods of apportioning State funds. It is evident that the creation of a State equalization fund is in itself an effort in this direction. In addition to the establishment of such funds a number of States have undertaken the adoption of new methods and new bases of apportioning the income of their permanent public school endowment funds, the proceeds of a State tax, or some other general State fund.

In 1921 Maine passed a new law providing for a State school fund and for a new method of apportioning the same. Reference has already been made to the provision setting aside \$100,000 of this annual fund as an equalization fund. The major portion of the State school fund is distributed on a threefold basis: (1) To every town is granted \$100 for each full-time teaching position in elementary schools and secondary schools; (2) \$3 for each person included in the town's school census (5 to 21 years of age); (3) the amount available to the towns on the basis of aggregate attendance

in elementary and secondary schools. It will be seen that this law recognizes that the chief factor in public school support is the individual teacher, and the State assumes the responsibility of guaranteeing a definite amount for each teaching position in the State. Aggregate days' attendance is likewise a basis which has many things in its favor. Nothing can be said, however, in defense of distributing any part of State aid on the school census basis. The method by which Maine provided in 1921 for distributing the major portion of the State school fund, however much of an improvement over methods previously employed, fails utterly to take into consideration the comparative ability and the comparative effort of the local school units to furnish funds.

In 1921 New Hampshire increased State appropriations for aid to public schools from \$255,000 to \$325,000. State aid from this fund is distributed upon the basis of the ratio of elementary-school expenses to equalized valuation rather than to the inventory valuation as had heretofore been done. The superintendent of public instruction writes:

This change was an equitable and highly salutary one. The equalized valuation represents the actual wealth of the district so far as this can be reached by taxation.

California makes the teacher the chief basis for distributing the major portion of State aid. By a law passed in 1921 the State provides \$30 for every elementary and every high-school pupil in average daily attendance. California maintains two distinct funds—the State school fund for elementary schools and the State high-school fund for secondary schools. By a law passed in 1921 the State elementary-school fund is apportioned as follows: \$700 is paid for every elementary teacher, and the remainder of the fund is apportioned on the basis of average daily attendance. This money must be matched by the county, with the result that there is guaranteed for each full-time elementary teaching position \$1,400 a year. In 1921 California not only doubled the amount of State aid to be provided by the State per pupil but adopted an entirely new method of apportioning her State high-school fund. The method provided by the law of 1921 recognizes three bases: (1) Flat quotas; (2) quotas for attendance in evening high schools, in special day and evening classes, and in part-time schools; (3) average attendance. A certain flat sum goes to every day high school, whether a four-year, a junior, or a senior high school, on the basis of the number of years of work it offers. In addition to this flat appropriation, each high school receives grants for units of average daily attendance, the amount per unit decreasing as the number of units increases.

New York and Massachusetts are two States which through recent legislation have undertaken to give definite recognition to differences in local valuations. By a law passed in 1920 New York provided that in addition to its regular district quota each district employing more than one teacher shall receive \$250 for each full-time teacher. Districts having one teacher only with a property valuation of \$100,000 shall receive a quota of \$200. Districts having only one teacher and with a property valuation of less than \$100,000 shall receive a quota of \$200 and \$2 for each entire \$1,000 that the assessed valuation is less than \$100,000.

It is to be regretted that space does not permit a detailed consideration of the methods employed by Massachusetts in distributing various State funds. It is probable that no other State in the Union has been so ready to experiment with new methods and new bases of apportioning school moneys. Prior to 1904 Massachusetts had changed her method of apportioning school moneys no less than 13 times. The law passed in 1919, creating the general school fund, also provided for a new method of distributing the income of the permanent school fund. As a result of this readiness to experiment, Massachusetts has evolved methods of apportioning State school funds which, whatever their defects may be, are from the standpoint of the scientific soundness of the principles they seek to recognize immeasurably superior to those of most of the States. Massachusetts is one of the few States which takes into consideration, in distributing State aid, the assessed valuation and the rate of taxation of the receiving unit. It must not be inferred that Massachusetts recognizes these two exceedingly important factors in distributing all State funds, for she does not. Nevertheless, she gives far greater recognition to them than the writer has found in any other of the 14 States he has thus far studied.

Massachusetts limits the income of her permanent school fund, the Massachusetts school fund, to towns whose valuation is less than \$2,500,000. The quota granted to any town is determined by two factors: (1) The town's total valuation; (2) the excess of its expenditure for certain public school costs over its quota from the general school fund, measured or equated in terms of tax rate. In distributing this fund towns are divided into three classes on the basis of valuation limits as follows: Towns having a valuation of (1) less than \$500,000; (2) from \$500,000 to \$1,000,000; (3) from \$1,000,000 to \$2,500,000. The aid is distributed in a manner designed to give the larger quotas to the towns of lower valuations and to the towns expending most in proportion to their ability.

The general school fund derived from the proceeds of the State income tax is distributed among all the towns and cities of the State in the form of reimbursements for teachers' salaries. The quotas

of the fund are paid out in two installments, from the first of which are paid what for convenience may be called the ordinary reimbursements; from the second installment are paid what may be called supplementary reimbursements. Ordinary reimbursements are paid in the form of definite quotas for each teacher or other school officer employed. In the distribution of ordinary reimbursements no recognition is given to the valuation or to the local tax rate of the receiving unit. The amount is determined solely upon the basis of whether the school officer was employed for full time or part time, his professional training, years of experience, and salary received from the town or city. On the other hand, supplementary reimbursements are paid on the basis of the community's assessed valuation per pupil. A study of the legislation passed by Massachusetts 1919-1922 will show that this State is committed to the following principles: (1) State aid should be given in the form of reimbursements for money previously expended; (2) the amount of State aid granted shall be determined by (a) the community's ability to help itself as indicated by its assessed valuation, (b) the community's effort as indicated by its local tax rate, (c) the quality of educational opportunity the community seeks to furnish as indicated by the number and preparation of teachers and the character of the educational facilities provided.

NEED OF NEW SOURCES OF REVENUE.

There are a number of reasons which have forced the States to seek to discover new sources of school revenue. First and foremost is the increasing cost of public education and the inadequacy of existing sources to meet these costs; second, a growing recognition of the unsoundness of the general property tax which, long has been and still remains the most important source of both State and local revenues. To these two reasons must be added a third, namely, that with the increase in school costs and revenues provided, permanent State endowments for common schools which at one time afforded important relief to the local communities have steadily declined, in relative importance until to-day in the majority of the States these funds are of well-nigh negligible importance, viewed from the standpoint of the proportion of total revenue which they provide.

DECLINING IMPORTANCE OF STATE ENDOWMENTS.

In 1890 the public schools of the United States derived 5.45 per cent of all school receipts from the income of permanent school funds and lands; in 1905, 4.37 per cent; and in 1920, 2.7 per cent. From this we see that the proportion of total school receipts derived from permanent funds in 1920 was only half of what it was

in 1890. The significance of this fact can not be fully appreciated unless we recall that, except for the admission of a number of new Western States with vast endowments for public schools, the per cent of total school receipts derived from permanent funds would have declined even more rapidly than it did.

The five States which derived the highest per cent of their total revenue from permanent funds in the year 1905 are Wyoming, Nevada, Texas, Utah, and Oregon. Perhaps there is no better means of coming to an appreciation of the decline in the importance of permanent school funds as sources of revenue than by comparing the per cent of total revenue derived from permanent funds in these States during the years 1905 and 1920.

TABLE 3.—Five States ranking highest in per cent of total revenue derived from permanent funds in 1905.

States.	Approximate per cent of total school revenue derived from income of permanent school funds and endowments.	
	1905	1920
Wyoming.....	49.30	23.8
Nevada (1906).....	49.19	11.3
Texas.....	27.69	13.6
Utah (1904).....	21.20	4.6
Oregon.....	13.53	4.2

From the above table we see that, whereas Wyoming and Nevada each derived nearly half of their total receipts for public schools from their respective permanent common school funds in 1905, Wyoming derived less than one-fourth from this source in 1920, and Nevada slightly more than one-tenth. In Texas permanent funds contributed more than one-fourth of the total school revenue in 1905, but less than half this proportion in 1920. In Utah permanent funds were five times as important as a source of revenue in 1904 as in 1920, and in Oregon approximately three times as important in 1905 as in 1920.

From this account of the declining importance of what was at one time in many a State not only the most important but the sole source of State school revenue, let us turn our attention to some of the newer types of State sources.

NEW SOURCES OF STATE SCHOOL REVENUE.

Of the new sources established by States to provide school revenues perhaps the most significant are the following: Corporation taxes, income taxes, inheritance taxes, occupation taxes, and severance taxes.

Corporation taxes.—New Hampshire, Maine, Kentucky, New Jersey, Virginia, and California are among the States which today depend for a portion of State school moneys upon the proceeds of State corporation taxes. California has applied this policy more widely than any other State, and may therefore be taken as an example of this important trend in school finance.

As the outcome of a tax-reform movement beginning at least as far back as 1894, California adopted in 1910 an amendment providing for the levying of a State corporation tax. This tax is levied on all corporations, the rate varying according to the type of corporation. In 1920 the State provided approximately 14 per cent of the entire moneys devoted to public schools. The major portion of this aid consisted of appropriations paid from the State general fund. Approximately 60 per cent of the general fund was derived from corporation taxes.

Severance taxes.—An epoch-making event in the history of school finance was the enactment by the State of Louisiana on July 1, 1920, of a law providing for a severance tax which places a tax on all natural products severed from the soil except agricultural products. A number of States, such as Utah and Minnesota, have long levied taxes upon ores, but a severance tax takes not only ores but timber, sand, gravel, clay, gas, oil, and all other nonagricultural natural products. The proceeds of this tax in Louisiana are devoted in part to the State university and the agricultural and mechanical college, and in part to State institutions for the deaf, blind, and other special classes. None of the proceeds goes to public schools; nevertheless, as a type of taxation it is of great significance and will perhaps prove very suggestive to many other States looking for new sources of school revenue. It is estimated that the Louisiana State University will receive annually from the severance tax between a million and a half and two million dollars. It is interesting to note in this connection that, in accordance with the recommendations contained in a survey of public education in Arkansas made by the United States Bureau of Education, the Arkansas Legislature of 1923 enacted laws providing for a State income tax and a State severance tax.

Income taxes.—An earlier portion of the present account has described at length the action of Massachusetts in 1919 by which she created a general school fund by setting apart a portion of the proceeds of the State income tax. We have also noted the inauguration of this policy by the Arkansas Legislature of 1923. Delaware is another State which in comparatively recent times has had recourse to a State income tax as an important means of providing State revenue for schools.

Inheritance taxes.—A study made in 1920 revealed the fact that at least five States—California, Delaware, Kentucky, Louisiana, and Virginia—were then devoting to schools moneys derived from taxes on inheritances. In 1923 Montana was added to this group through the passage of a law which provided that 50 per cent of the proceeds of inheritance taxes should be devoted to schools.

Occupation taxes.—In 1921 a law was passed by the State of Minnesota designed to do away with the practice of taxing iron ore on a tonnage basis and to substitute therefor a 6 per cent occupation tax on net profits. The constitutionality of this law was upheld by the United States Supreme Court and thus the right of the State to impose an occupation tax was established. At the present writing it is claimed that the mining companies of the State owe the State of Minnesota no less than \$5,000,000 in back taxes. Fifty per cent of the proceeds of the Minnesota occupation tax will be added to the general revenue fund, 40 per cent to the permanent school fund, and 10 per cent to the permanent university fund. The tonnage-tax law provides a 10 per cent penalty if payment is not made by June 1 of the following year.

Miscellaneous.—Certain States have provided that the proceeds of a tax upon special commodities or products shall be devoted to schools. Thus in 1921 Montana enacted a law providing that one-third of the proceeds of taxes on gasoline should be apportioned to public schools.

We have now discussed the most important developments and tendencies in State school finance during the biennium 1920-1922. It is to be regretted that space does not permit recounting a number of others. One at least should be mentioned, namely, the tendency to enact State laws prohibiting local communities from establishing sinking funds for the purpose of paying the interest and principal of bond issues. Such laws require that in the future bonds shall be issued in series and a tax levied sufficient to meet payments of interest and principal. Massachusetts and New Jersey are among the States which have recently enacted legislation of this character. The Massachusetts law provides that no further sinking funds for the payment of debts shall be established by any district, town, or city, except Boston, but that such debts shall be paid by such annual installments as shall extinguish the same at maturity. The law further requires the levying of an annual tax sufficient to meet all principal and interest bond obligations.

TENDENCIES IN LOCAL SUPPORT—COUNTY AND DISTRICT.

In 1890, of the total receipts for public schools in the United States, 68 per cent was derived from local sources. In 1920 slightly

more than 83 per cent.³ Although there has been an increase in the proportion of the total school revenue furnished by local sources in nearly every State in the Union, with a few striking exceptions, such as Massachusetts already noted, the most striking increase has been in the South Central and South Atlantic States, where in 1890 of the total receipts 50 per cent or less than 50 per cent was provided by local units. In 1890 the per cent of total public school receipts derived from local sources was, in North Carolina 2; South Carolina 13, Tennessee 13, Texas 12. In 1920 North Carolina derived 70 per cent of her total public-school revenue from local sources; South Carolina 84 per cent; Tennessee, 82 per cent; and Texas, 46 per cent. A study of the situation in Alabama, Arkansas, Georgia, Kentucky, Louisiana, and Mississippi shows increases varying from 15 to 30 per cent.

Whether we view the United States as a whole or individual States, we discover that, despite a certain degree of progress in matters of centralization, and despite the utterances of educational theorists and court decisions to the effect that public schools are State, not local, institutions, in actual practice schools in the United States have tended throughout the last quarter of a century to become more and more locally supported.

The results of this tendency are being felt to-day as never before. From almost every State come reports of inadequate funds for the support of public schools and accounts of frantic attempts to cut, in the name of economy, teachers' wages and to reduce school curricula to the narrow, arid state of generations gone. The majority of the States are to-day financing their schools under the district system. The story of this system wherever found is the same: Inequalities in ability to produce school revenue, inequalities in effort and zeal, inequalities in educational opportunities.

It is a realization of the unfairness of existing systems of local support and local control and the disastrous and incurable evils produced by such systems that has led many scientific students of education and several of the States to give serious consideration to the possibilities of deriving a much larger proportion of school revenues from units more capable than school districts of equalizing school revenues, burdens, and opportunities. Those looking for a solution have turned their attention to the Nation, the State, and to larger local units, such as the county.

Some of the States, of which Maryland is a notable example, have depended upon the county as a unit of organization and school support from the very beginning of their statehood. Nevertheless,

³83.2 per cent, consisting of 11.4 per cent from county sources and 71.8 per cent from district and other local sources.

a widespread recognition of the significance of the county as a source of school revenue is of comparatively recent development. The truth of this statement is suggested by the fact that the analyses of the public-school revenues prepared by the United States Bureau of Education for the years prior to 1918 did not report county school receipts separately, but simply included them under the general caption, "Local receipts."

Another fact pointing to the rising importance of the county in the support of public schools is found in the fact that, whereas in 1918 only 7.9 per cent of the total school receipts were provided from county sources, in 1920 the proportion contributed by the county had increased to 11.4 per cent. During this biennial period the increase in certain States was exceedingly marked. Of 17 States deriving 15 per cent or more than 15 per cent of their school revenues from county funds in 1920, in only two, Arizona and New Mexico, was the proportion less than in 1918. In all others the proportion remained the same or was greatly increased. The most notable increases were in Kentucky, Oregon, Ohio, North Carolina, Nevada, Louisiana, and Mississippi. Among these States the smallest increase was in Kentucky, where in 1918 the county contributed 17 per cent of the total school revenue and 25 per cent in 1920. The greatest increase was in Ohio, where in 1918 the county contributed only 1.7 per cent and 54 per cent in 1920.

Evidences are not lacking that the tendency already observed during the biennium 1918-1920 for the county to become an increasingly important source of school revenue continued throughout the biennium 1920-1922. A constitutional amendment adopted by Georgia in 1920 permitted each county to levy, on the recommendation of the State board of education, a county school tax of not less than 1 nor more than 5 mills. As the result of this law, half of the counties in the State were required in 1921 for the first time in their history to levy a local school tax. The total expenditure for public schools in Georgia increased from \$11,900,000 in 1920 to \$14,500,000 in 1921.

Not only in the South and Middle West, but in the West as well, has the county grown in importance during the last biennium. In California under the law of 1919 every county was required to levy an elementary county school tax sufficient to provide a sum equivalent to \$21 per pupil in average daily attendance. In 1921 an act was passed increasing the tax to a rate sufficient to provide at least \$30 per pupil, or \$700 per teacher employed, in case the sum estimated on this basis exceeds the sum required to furnish \$21 per pupil. Under the law of 1919 a limit of 5 mills was placed upon county taxation; the law of 1921 fails to state any limit and, by this failure, removes all limits. The county is required further to levy a tax sufficient to provide \$60 per high-school pupil in average daily at-

tendance and to provide for reimbursements to all high-school districts within the county for money expended for transportation of pupils living in territory in the county not included in any high-school district and further reimbursements to all high-school districts for textbooks furnished free to pupils residing in portions of the county not included in a high-school district.

By an act passed May 27, 1921, California provided for the organization of junior college districts and for the maintenance of junior colleges therein. In each county wherein there is not a county junior college a special tax upon all taxable property within the county must be levied. This tax must be sufficient to defray the cost of educating for the current year students attending a junior college in an adjoining county.

The most important recent tendencies in district school support are the increasing of the limits of local taxation and bonding limits and the requiring of the preparation of budgets to be approved by higher educational authorities.

Preceding paragraphs have noted the declining importance of the State as a source of school revenue. It is scarcely necessary to note that this declining importance of State sources has been paralleled by an increase in the importance of local sources. Thus, whereas in 1890 approximately 68 per cent of the total receipts for public schools in the United States was furnished by local sources, in 1920 nearly 72 per cent was thus provided, excluding county revenues. No one conversant with the facts would question the statement that the tremendous increase in school revenues in the United States during the past 25 years has been due chiefly to the increase in the efforts put forth by the local school units. Practice varies widely with respect to the authority and responsibility which the various States delegate to their local school units in the matter of raising school revenues. Massachusetts and California, two States which without question belong in the highest rank educationally, have no limits as to rates of local school tax. Arkansas, on the contrary, fixes the maximum district tax at 12 mills, with the result that rates in this State vary all the way from 0 to 12 mills. The impossibility of maintaining schools from the proceeds of taxes levied under existing rates has led a number of States during the biennium to endeavor to have these limits raised or removed entirely. The same tendency is visible with respect to limits of indebtedness.

THE PRESENT SITUATION.

Despite the vast increase in school funds which the present account has recorded, despite also the progress which has been made in

establishing new sources and in apportioning State aid in a more just, scientific, and efficient manner than formerly, the educational situation with which the United States is confronted at the close of the year 1922 leaves much to be desired. It makes little difference to what section of the country we turn our attention, in nearly every quarter the story is one of inadequate teachers' salaries, inadequate buildings, inadequate revenues, glaring and ominous inequalities in educational opportunities. We are informed that never in the history of New York City has the proportion of children attending school on part time been so large. Again, we learn "that the high-school situation in Boston has never been as bad as at present." In 1920 the annual cost per pupil in average daily attendance for the United States as a whole⁴ was approximately \$64, yet in 1922 the annual cost per pupil in average daily attendance in Tennessee rural elementary schools⁵ varied all the way from \$39 to \$7. In 1921 in Arkansas⁶ the highest average county expenditure per pupil enrolled was \$31, the median expenditure was \$10 per year, and the lowest, \$6.

There never was a time in the history of American education when there was a greater need for sane and scientific leadership. Throughout the breadth and length of the United States to-day city, State, and National organizations and commissions are working with a zeal and devotion unsurpassed. On the one hand we hear the cry that public education has exceeded all legitimate bounds and that the public schools must retrench. This cry is met on every hand by the carefully worked out and intelligent findings of scientific students who are at one in declaring that school facilities must not be lessened but immeasurably increased. These students point out that increases in school costs have been accompanied all along the line by vast increases in national income and that the situation we are now confronting is not one which should arouse fear but rather one which should urge us to a scientific study of the sources and distribution of school revenues.

Dr. Edwin R. Seligman, of Columbia University, outstanding national authority in political economy, declares that—

While it is true that the educational budget has increased more rapidly than the population, it is not true that it has increased more rapidly than the wealth of the community. On the contrary, it may be affirmed with little fear of contradiction that, from the economist's point of view, the growth of prosperity in the United States as a whole has been so enormous as to make the proportion of educational expenditures to real wealth of the community actually smaller than it was in past decades.

⁴ Bu. of Educ., Bul., 1922, No. 29, p. 44, Table 27. This amount is the sum of columns 12 and 13.

⁵ Tenn. Supt. of Pub. Instruction Rep., 1921-22, pp. 48-49; Hamilton County, \$39.47; Hancock County, \$7.

⁶ Swift, F. H., The Public School System of Arkansas, Part II, Public School Finance, p. 13, Table 10; county expenditures, Pulaski, \$30.54; Hempstead, \$10.21; Stone, \$6.24.

It is the writer's belief, based upon a first-hand study of nearly one-third of the States, that there is not a State in the Union which, if it were to adopt a sound and scientific system of financing education, would not be able to place adequate educational facilities within the reach of every school child and to maintain a complete free system of public education from the kindergarten to the State university. It is necessary to acknowledge with regret that such a condition is not to be found. Not only do the schools in a number of the States depend for a considerable portion of their revenues upon pupils' tuition fees and gifts of patrons, but throughout the breadth and length of our land there are many school districts which levy no tax whatsoever and maintain no schools.

This situation is found not only in the poorer States but in the prosperous Middle West. It is unnecessary here to dwell at length upon the policies through which reforms must be inaugurated and educational opportunities and the burden of school support equalized, for these have been set forth in a number of bulletins recently published by the Bureau of Education as well as in private publications.⁷ It may be well to note, however, that the greatest obstacles at the present time to a sound system of school finance are the district system, unscientific methods of apportioning State aid, and the employment of the general property tax as the chief source of school revenue.

Despite the features of the present situation just described, there are abundant reasons for confidence in the future. There never was a time when the citizens of the United States were so alive to the importance of public-school finance and to the necessity of inaugurating reforms. Moreover, there never was a time when economists and educational experts were making available for the benefit of the public such a large amount of scientific information bearing upon the problems of public-school finance. The results of this public attitude and of the work of students of school finance are clearly discernible in the legislation of the last biennium. Arizona, California, Delaware, Georgia, North Carolina, Texas, Virginia, and Washington are a few of a growing number of States which in some cases have completely revised their systems of school support; others have made important and far-reaching modifications. The financial crisis of which we hear on every hand is not without its compensations, for the pressure brought about by this crisis has forced the public to recognize the importance of the economic factors entering into the

⁷The interested reader is referred to *State Policies in Public School Finance*, Bu. of Educ., Bul., 1922, No. 2; *The Public School System of Arkansas, Part II, Public School Finance*, Bu. of Educ., Bul., 1923, No. 11; *Public Education in Oklahoma*, Bu. of Educ., 22, Ch. III, *Problems of Financing Public Schools*; *Studies in Public School Finance*, vol. University of Minnesota, Research Publications.

maintenance of a system of public education. It is a matter of congratulation that the most difficult problem in the history of the race, that of educating a citizenry drawn from the four quarters of the earth, falls upon the richest of all nations. In this task, as noble as it is difficult, the United States of America need not and will not fail.

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