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Research Bulletin

OF THE

National Education Association

Major Issues in School Finance

Part I

(Part II of this study dealing with problems of state school finance will appear in the January, 1927 issue of the Research Bulletin)

The Nation's Economic Ability to Meet School Costs..... 239

School Costs and Economy in Public Expenditures..... 249

PUBLISHED BY THE RESEARCH DIVISION

OF THE NATIONAL EDUCATION ASSOCIATION

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FOREWORD

The recent growth in school costs has been accompanied by misgivings in certain quarters. Some have stated that school costs are larger than the economic resources of the nation justify. They have contended that a reduction in school costs is demanded by proper economy in public expenditures. Others have challenged these conclusions. They have maintained that the economic power of the nation is more than enough to justify existing school costs. They have stated that the expenditures for education can be justified under a policy of economy and efficiency in public expenditures.

If school costs are greater than they should be the fact should be squarely faced. No public service has a right to claim more than can be justified by its importance to the general welfare and the nation's ability to pay. No enterprise, either public or private, should be allotted a larger share of the nation's income than is necessary for its effective operation.

On the other hand, if present expenditures for education can be readily justified when measured against the criteria of the nation's ability to pay and the exercise of constructive economy in public outlays, the fact should be made known. Otherwise great harm may be done to the schools and the children of the nation.

The facts necessary for an intelligent consideration of these questions, as they effect the nation as a whole, will be found in this issue of the Bulletin. The next issue will present similar facts for the individual states. These two Research Bulletins, published as parts I and II of a study entitled, *Major Issues in School Finance*, present the results of one of the most significant investigations yet completed by the Association's Research Division. They deserve the thoughtful study of public school people and public spirited citizens throughout the country.

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

The Nation's Economic Ability to Meet School Costs

In recent years many questions have been raised concerning the relationship of school costs to the nation's economic development. Some have stated that the nation's economic resources are insufficient to support the amounts being spent for education. The schools have been warned that the cost of public education must be brought within a limit of expense which the public can bear. Others have contended the nation can easily meet existing and even larger school expenditures if efficiency demands, and that there is no basis for the fear that increasing expenditures for education will result in undesirable economic developments.

This is one of the major issues in the field of school finance. The following pages present data pertinent to its intelligent consideration.

Ratio of School Costs to Income and Wealth

How much of its economic power is the United States devoting to education? To answer this question it is necessary to have estimates of the economic power of the nation and of the amount expended for schools. Wealth and income have been widely accepted as the two best indications of the economic power of a nation. By wealth is meant the value of all tangible property accumulated over an extended period of years. By income

is meant the aggregate of all individual incomes in a single year.

The wealth of the United States was \$320,803,862,000 in 1922 according to the Federal Census. David Friday recently estimated that we added \$12,000,000,000 to our national wealth through savings in 1923.¹ There was doubtless a further increase in our wealth in 1924. It is, therefore, conservative to estimate that the value of tangible property in the United States in 1924 was probably not less than \$335,000,000,000.²

The most recent scientific estimates of the current income of the nation are those of the National Bureau of Economic Research for 1919 to 1921. The average current income of the United States in these years was \$68,049,558,000. Some estimates of current income for 1923 run as high as \$70,000,000,000.³ It is probable that the nation's income in 1924 was not less than \$66,000,000,000.

The latest comprehensive figures as to school costs in the United States are for the school year 1923-24. In this year approximately \$2,336,073,018⁴ was expended for all types of schools, both public and private, 78 percent of which, or \$1,818,743,917, was expended for public elementary and secondary schools. The estimated value of all property, sites, buildings, etc., used for school purposes was \$5,438,252,562 in 1924. The value of public elementary and secondary school prop-

¹ See page 13 of article by Ernest Minor Patterson, of Wharton School of Finance, University of Pennsylvania, in *The New Republic*, November 4, 1925, Part Two.

² That this is a conservative estimate is indicated by Federal Trade Commission's recent Report on National Wealth and Income, 1926.

³ Report of Federal Trade Commission, on National Wealth and Income, 1926.

⁴ The figures given as to the cost of education omit, because of lack of available data, expenditures by a few organizations which might be termed schools. See footnotes to Table 2.

THE TOTAL INCOME of the people of the United States in 1918 is estimated, in round numbers, at 60 billions of dollars. This was a war year. During the two years of rapidly rising prices and wage rates that immediately followed the close of the war, the total money income of the people rose rapidly. It is estimated at more than 67 billions of dollars in 1919 and nearly 75 billions in 1920. When depression paralyzed a large portion of industry and prices and wage rates fell the total money income declined also. According to the Commission's estimates, it was less than 53 billions of dollars in 1921, but increased rapidly as business recovered. It is estimated at nearly 62 billions in 1922 and nearly 70 billions in 1923.—*Summary of Federal Trade Commission Report on National Wealth and Income, Federal Trade Commission, Washington, D. C., pp. 12-13.*

erty was \$3,744,780,714. These statements may be based on the preceding figures:

- (1) In 1924, the value of property used by public elementary and secondary schools was 1.12 percent of the value of all tangible property in the United States. The value of property used by all types of schools, both public and private, was 1.62 percent of total property values of the United States.
- (2) In 1924, 2.76 percent of current income was expended for public elementary and secondary schools. The cost of schools of all types, both public and private, required 3.54 percent of the nation's income.

Chart I presents these facts in graphic form. It is clear school support at present requires but a minor fraction of the nation's economic power. It has been contended, however, that even the small percentage of our economic energy allotted to education is larger than it should be.

Value of Education Versus Its Cost

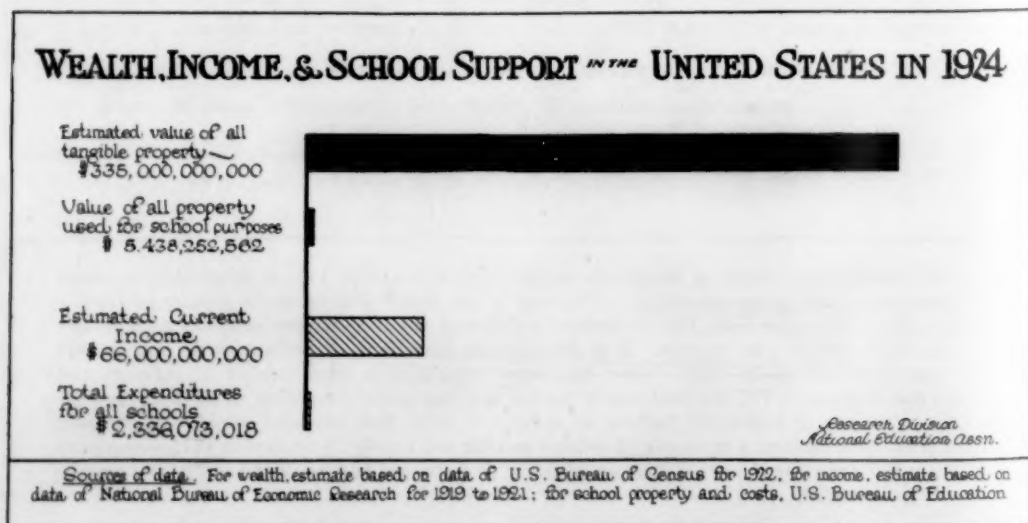
Are the percentages of our wealth and income devoted to school maintenance too large?

- ¹ Census of Manufactures, U. S. Department of Commerce.
- ² Agricultural Yearbook, 1924, U. S. Department of Agriculture, p. 114.
- ³ Estimate of Bureau of Industrial Technology, New York City, March, 1926, including these items: cost of new cars and accessories, upkeep and repairs, tires, garaging, gasoline and oil.
- ⁴ Estimate based on data in *Cost of Government in the United States*, National Industrial Conference Board, 1926, p. 86.
- ⁵ Commerce Yearbook, 1924, U. S. Department of Commerce, p. 259.

No dogmatic answer can be given to this question. Every man may answer for himself. To arrive at an intelligent answer, he will need to do two things. First, assign a place to education in the scale of human values. He must decide whether education is more important or less important than other major services society provides for. Second, he will need to compare the percentages of our income used by these services with that expended for schools. He will then be in a position to answer the next question.

Is the percentage of the nation's economic power devoted to education greater than its importance justifies? Reliable indications are available as to the amount of economic energy consumed by a number of our major interests. In 1923 the total value of the nation's manufactured products was \$60,555,998,000.¹ The value of agricultural products in 1924 was \$12,404,000,000.² The annual national expenditure for the purchase and upkeep of automobiles according to the latest data available is \$8,768,000,000.³ In 1924, the total governmental expenditures for all purposes, other than schools, was \$7,915,926,982.⁴ The total value of building construction in the United States was not less than \$6,000,000,000 in 1924.⁵ In 1924 the people of the

CHART I



United States expended \$5,522,000,000 for certain articles in the luxury class, namely: soft drinks and ice cream, theaters, candy, chewing gum, tobacco, jewelry, perfumes and cosmetics.¹

The figures just given as to value of products and expenditures for certain major services cannot be directly compared with the expenditures for education as a basis for an exact estimate of the percentage of the nation's income going to each. All of the items given are not mutually exclusive. This and other reasons make it undesirable to use the figures given for this purpose. They can be accepted, however, as evidence that school support is claiming a much smaller fraction of the total supply of economic energy than a considerable number of other great national interests. We may agree or disagree with the statement: "Education is the most important business of a nation." The fact is, however, that there are a number of "businesses" each of which yearly claims several times as much of our economic power as the schools.

Is the percentage of the nation's economic power devoted to education greater than its importance justifies? If a person believes the general welfare would have been advanced had the school expenditures of \$2,336,073,018 in 1924 been reduced so that we could have slightly increased the:

Value of manufactured products which was approximately \$60,000,000,000;

Value of agricultural products which was \$12,404,000,000;

Expenditures for automobiles which were \$8,768,000,000;

Expenditures for other governmental activities which were \$7,915,926,982;

Value of building construction which was \$6,000,000,000;

Expenditures for certain luxuries which were \$5,522,000,000;

then he will answer "yes" to this question. Otherwise, his answer will be "no."

¹ Estimated Expenditures of United States for Certain Articles, 1920-24. U. S. Treasury Department, April, 1925.

CHART II

IS TOO MUCH OF OUR ECONOMIC POWER GOING FOR SCHOOL SUPPORT ?

Cost of all schools, public and private - 1924
\$2,336,073,018

Value of all manufactured products, - 1923
\$60,655,998,000

Value of all agricultural products, - 1924
\$12,404,000,000

Cost of automobile transportation - 1925
\$8,768,000,000

Expended for all governmental activities, federal, state, and local, 1924 (Excluding school costs).
\$7,915,926,982

Value of building construction - 1924
\$6,000,000,000

Expenditures for certain luxuries - 1924
\$5,522,000,000

Research Division National Education Assn.

Sources of data: U.S. Bureau of Education; Yearbooks of U.S. Departments of Commerce and Agriculture; Bureau of Industrial Technology, New York City; National Industrial Conference Board, New York City, and U.S. Treasury Department.

Interpretation of data: The items given are not mutually exclusive, for example, part of the value of new automobiles and accessories and other items included in the cost of automobile transportation are also included in the value of all manufactured products. Some of the luxury costs are also included in this item, etc.

TABLE 1—WEALTH, INCOME AND SCHOOL COSTS IN THE UNITED STATES, 1890 TO 1924

Year	Value of tangible wealth	Current income	Cost of public elementary and secondary schools	Cost of all schools, both public and private	Percentage relationship of public elementary and secondary school costs and		Percentage relationship of cost of all schools, both public and private and		Amount of income available for all purposes other than school support	Index number of whole-sale prices, 1913=100	Amount of income available for all purposes other than school support in 1890 dollars
					Wealth	Income	Wealth	Income			
1		3	4	5	6	7	8	9	10	11	12
1890	65,037,091,000	12,082,000,000	140,506,715	189,684,065	.22	1.16	.29	1.57	11,892,315,935	81	11,892,315,935
1900	88,517,307,000	17,965,000,000	214,964,618	290,202,234	.24	1.20	.33	1.62	17,674,797,766	81	17,674,797,766
1912	186,299,664,000	30,400,000,000	482,886,793	651,897,171	.26	1.58	.35	2.13	29,948,102,829	99	24,502,993,209
1924	335,000,000,000	66,000,000,000	1,820,743,936	2,336,073,018	.54	2.76	.70	3.54	63,663,926,982	150	34,378,520,580

Sources of data: Column 2, from U. S. Bureau of the Census; Column 3, National Bureau of Economic Research; Columns 4 and 5, U. S. Bureau of Education. Column 6 is obtained by dividing column 4 by column 2; Column 7 is obtained by dividing column 3 by column 2; Column 8 is obtained by dividing column 5 by column 2; Column 9 is obtained by dividing column 3 by column 4; Column 10 is obtained by subtracting column 3 from column 5; Column 11, 1924 Commerce Yearbook, U. S. Department of Commerce, page 70; Column 12 is obtained by reducing the amounts of column 10 to dollars having the same purchasing power of 1890 by using index numbers of column 11. The data on wealth and income for 1924 are estimated independently.

Economic Effect of Increase in School Costs

Estimates as to the nation's wealth, income and school expenditures are available for a considerable period of years. These are given in Table 1. This table clearly shows that the percentage of the nation's economic power going for school support is increasing. Can this tendency continue? Is it possible further to increase the share of the nation's economic resources allotted to school support?

Provided the educational product of the school is sound it is possible to increase the portion of a nation's income going to education indefinitely. Chart III shows why this is possible. This chart represents hypothetical amounts of yearly current income in a nation at three widely separated periods, and the amount and percentage of total income allotted for school support in each of these periods.

During the first period the yearly income of the nation is \$1,000,000 and of this amount \$50,000 or five percent is devoted to school support, leaving \$950,000 or 95 percent for all other purposes. In the second period, the nation's income has increased to \$2,500,000. Of this amount \$250,000 or 10 percent is expended for schools, leaving \$2,250,000 or 90 percent for all other activities. In the third period the nation's income has reached \$5,000,000 and it expends \$1,000,000 or 20 percent of this amount for its schools and has \$4,000,000 or 80 percent left for other things.

The nation in the third period is spending four times as great a percentage of its income for education as in the first, but has more than four times as much to spend for purposes other than school support in the third as in the first period.

This is the tendency one should expect in a civilized nation which maintains facilities for the effective education of its people. The amount expended for schools today returns tomorrow in the form of increased productivity. Russia has the people, the natural resources, everything that makes the United States economically the strongest nation in the world, except the product of the school—an educated populace. In the United States the school, for generations, has been building up a high level of educational attainment. The majority of our population reads with facility, and therefore, has the keys to the experience

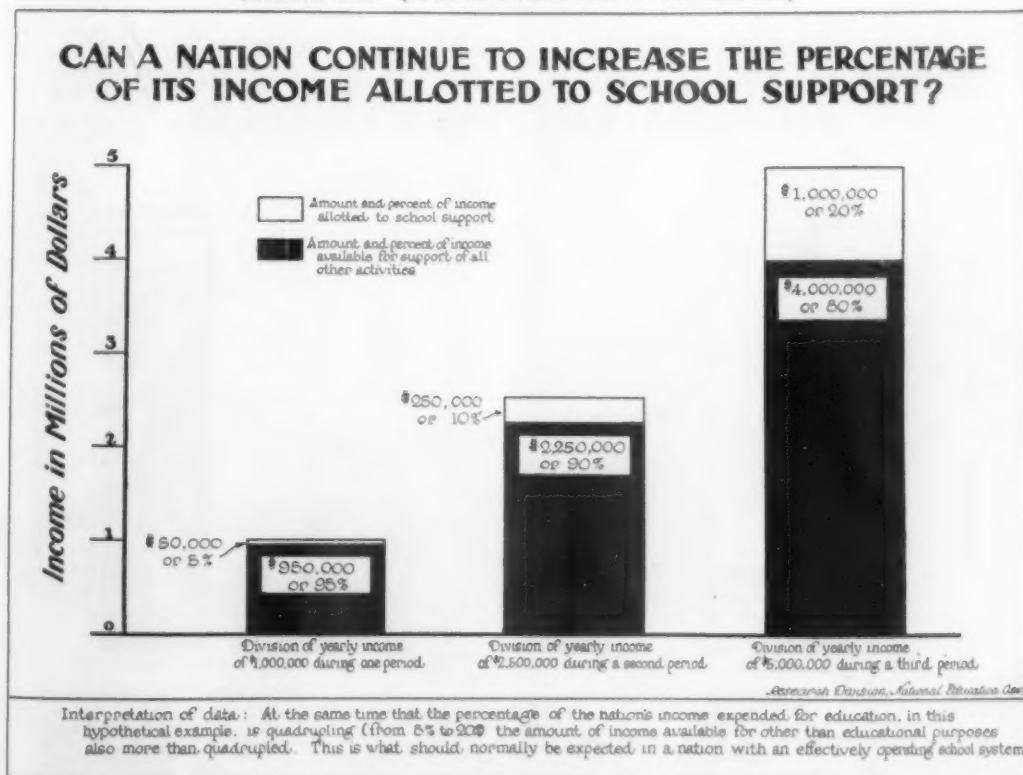
of others. Education has created that flexibility of mind in the masses of our people that makes change comparatively easy. The introduction of new machinery and methods of production is readily accomplished. Cooperation on a voluntary basis and on an extensive scale is readily gained. Witness the success with which farm cooperatives have been organized and the ready response of industry to the campaign of the Department of Commerce for waste reduction. Such things are impossible in a nation still in the grip of ignorance.

Has the tendency to increase the percentage of income of the United States devoted to education been accompanied by decreases or increases in the economic power available for other purposes? In the United States increases in school costs have been accompanied by steady and substantial increases in the amount of income available for other purposes. This fact is supported by the data in Table 1, and graphically represented in Chart IV. Between 1890 and 1924 the percentage of our income going to education increased from

1.57 to 3.54. In 1890 the amount of national income used for other purposes than school support was \$11,892,315,935. In 1924 the corresponding figure was \$63,663,926,982. Part of this increase is due to the depreciation in the value of the dollar. Chart V shows, however, that the economic power of the nation available for purposes other than school support, stated in dollars of 1890 purchasing power, was approximately three times as great in 1924 as in 1890. While our population increased 80 percent our resources over and above those used for school support increased 189 percent.

Large increases have taken place in the nation's economic output in practically all important forms of production, whether the situation is studied over a long period or in recent years. The net value of all farm products in 1913 was approximately \$7,199,000,000. In 1924 the corresponding figure was \$12,404,000,000. The value of all manufactured products in 1914 was \$24,246,434,724, in 1924 \$60,555,998,000. The banking power of the United States (as measured by the aggregate amount

CHART III.—(A HYPOTHETICAL EXAMPLE)



of capital, surplus, and individual profits, deposits, and circulation) in 1913 was \$23,360,000,000, in 1924, \$56,447,000,000.¹ Building and other construction in 1924, showed the largest volume in our history—the value of all construction reaching a figure of not less than \$6,000,000,000.²

Part of these increases is due to depreciation in purchasing power of the dollar. Chart VI shows, however, that when correction is made for this factor there is still evidence of substantial increases all along the line in the amount and volume as well as in the value of production. This conclusion is supported by the following statements quoted from the 1924 Yearbook of the United States Department of Commerce:

Farm Productivity. The aggregate (agricultural) production of 1924 has been exceeded in only two years in our history—1920 and 1915.

Factory Productivity. The figures for 1923 when reduced to a quantitative basis (in order to avoid the effect of decreased purchasing power of the dollar) show that our manufacturing output has

increased by fully 60 percent over that of 1914. It also shows a very substantial gain over 1919. Manufacturing output reached its highest point in our history in 1923. The Department of Commerce index for that year averaged 119, based on 1919 as 100. The 1924 index was 5 percent less than this peak, but higher than in any other year since the end of the war.

Banking Power. In any comparison of pre-war and post-war banking resources allowances must be made for the rise in the general price level and for the important changes in banking practices due to the establishment of the Federal reserve system. Account must also be taken of the heavy inflow of gold from abroad since 1914 and particularly in the past three years. With all due allowance, however, the fact that the banking power of the country rose from an average of \$23,360,000,000 for the five years 1911 to 1915 to \$56,447,000,000 in 1924 represents a large expansion in the real volume of American business.

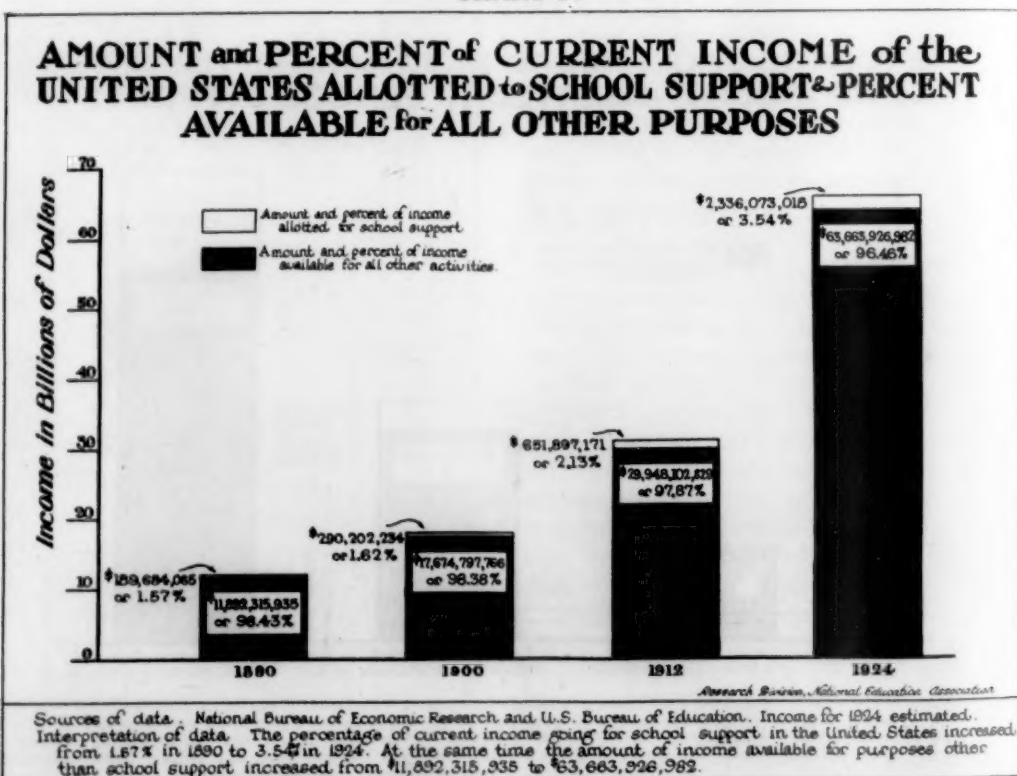
Building Construction. A higher volume of construction activity was maintained in 1924 than in any other year covered by statistics.

Exports and imports. Exports in 1924 were 86.2 percent greater in value than in 1913; 94.2 percent greater than in 1914; and 112 percent greater than the 1910-1914 average. The increase in value

¹ 1924 Commerce Yearbook, U. S. Department of Commerce, p. 437.

² Ibid, p. 261.

CHART IV



of imports has been more marked, the 1924 figures exceeding that of 1913 by 99.1 percent, of 1914 by 90.6 percent, and the average 1910-1914 by 113.9 percent. While these increases have been in considerable part due to higher prices there has been a definite growth in the physical volume of trade in both directions.

Electrical Energy. During 1924 the public service central stations produced 59,013,590,000 kilowatt hours of electric energy, about 5½ percent more than in 1923. This is the highest output ever attained. Favorable interest rates resulted in many extensions and improvements. Though only a little more than 40 years old, the electric light and power industry is now one of the largest industries of the country.

Security Issues. The capital flotations, including both stocks and bonds, in 1924 far exceed those of any previous year.

These statements are in agreement with the figures for total national income which show a substantial increase after proper correction has been made for depreciation in the purchasing power of the dollar. The nation's income stated in dollars of the purchasing power of 1913 was 38 percent greater in 1924 than in 1913 and 35 percent greater in 1924 than in 1919.

Such data as are available concerning economic conditions in 1925 and 1926 indicate a continuance of the rapid industrial development which foregoing facts reveal for 1924. The 1925 Yearbook of the U. S. Department of Commerce, issued as this bulletin goes to press, contains this statement:

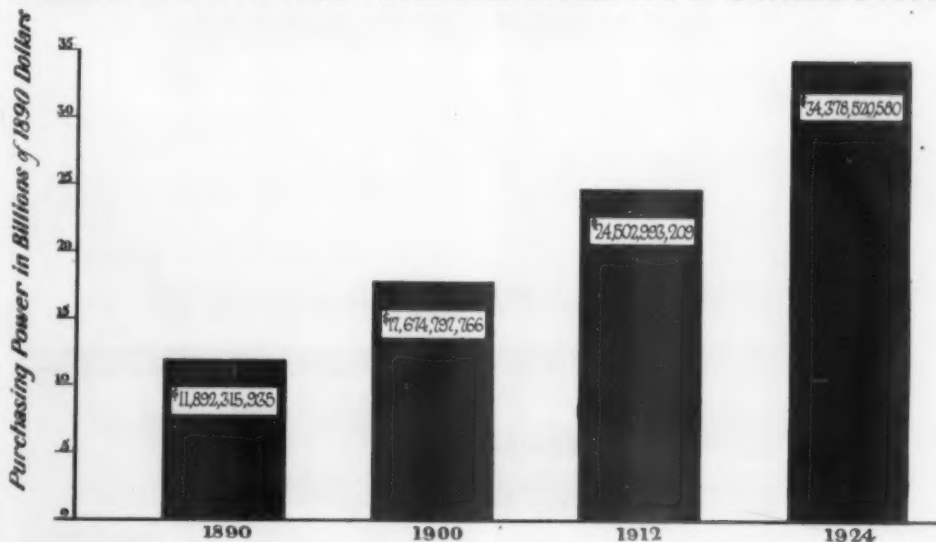
Considered as an entirety, the industry and commerce of the United States during 1925 reached the highest levels ever attained in our history, not even excepting the years of abnormal war activity.

The school has played a major role in increasing the nation's economic power. The cumulative effect of its contribution over several generations in putting large masses of the population in possession of fundamental skills, such as reading ability, which makes the experience of all available to the individual, and in creating that flexibility of mind upon which improvements in methods of production is dependent, is probably greater than is generally realized.

Estimates may vary as to just how influential the schools contribution has been to economic growth. But one fact cannot be challenged. *A steady and substantial increase in*

CHART V

PURCHASING POWER IN 1890 DOLLARS OF THE PART OF THE NATION'S INCOME USED FOR PURPOSES OTHER THAN SCHOOL SUPPORT



Research Division, National Education Assn.

Sources of data. National Bureau of Economic Research, U.S. Bureau of Education. Index number of whole-sale prices, 1890-1924. U.S. Department of Commerce p70 used in reducing current dollars to 1890 dollars.
Interpretation of data. The purchasing power of the part of the national income used for purposes other than school support, stated in 1890 dollars, increased from \$11,892,315,835 to \$34,378,520,580 or 188% between 1890 and 1924.

the percentage of our economic power going to school support has not been accompanied by decreases in the amount available for other purposes. The opposite is the case.

Today the United States is in the strongest economic position ever occupied by a nation in the world's history. There is abundant evidence to support the statements of Herbert Hoover in his recent annual report that:

While wages are higher than in 1920, wholesale prices are lower. We have thus the highest real wage in our history—the standard of living of the country as a whole was the highest in our history, and therefore the highest in all history.¹

It is true that our farm population has had a difficult period of post-war readjustments. However, this is not the result of inability to produce. The American farmer was never able to produce more effectively than today. The farmers' difficulty is inability to realize a proper return for the abundant product which results from his labor.

The farmer's uneviable economic plight is

not due to a shortage of the amount of economic energy available for agricultural production as the World's Work recently pointed out:

Congress is not hounded by men who want to know how to raise larger crops, but by men who want help in selling the too large crops which they have already raised.²

School Costs and Increase in Capital

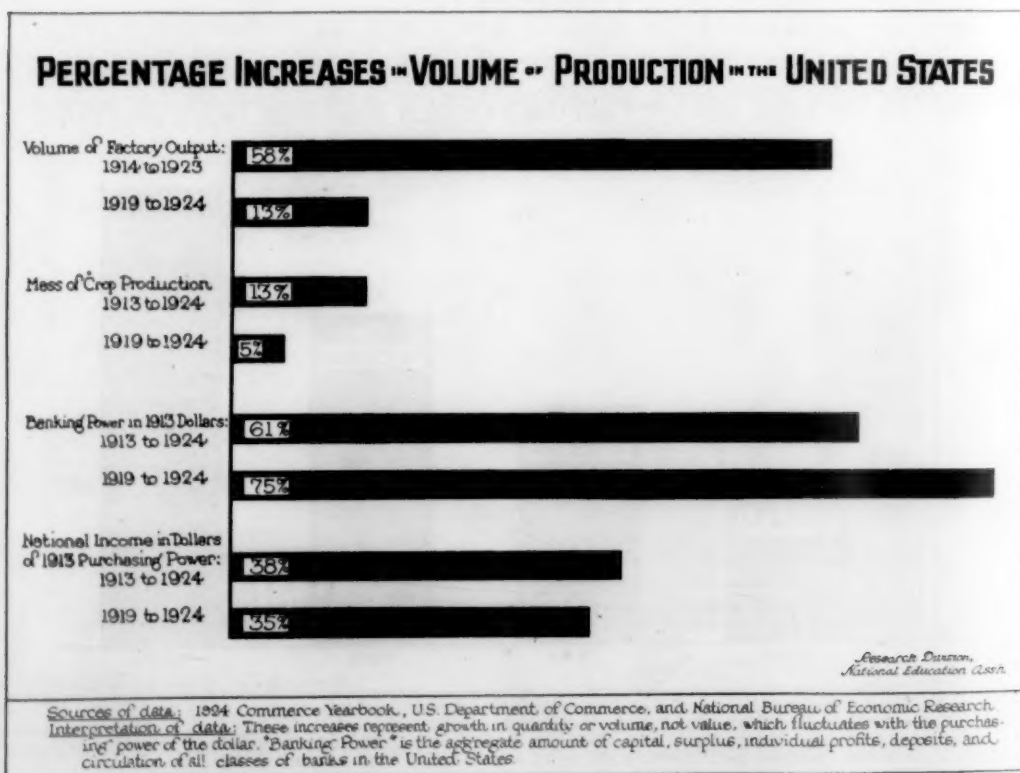
Has the growth of school costs prevented increases in the amount of the nation's savings and capital? The preceding section presents evidence that the United States is rapidly increasing its economic productivity. Is the nation's growing ability to produce wholly the result of more effective use of the capital at the command of industry or has there been a growth in available capital?

Chart VII shows that the value of all tangible wealth in the United States increased from \$65,037,091,000 in 1890 to \$335,000,-

¹ See pp. 4 and 30, Thirteenth Annual Report of the Secretary of Commerce—Fiscal Year Ended June 30, 1925, Washington, D. C., Government Printing Office.

² World's Work, September, 1926, p. 506.

CHART VI



000,000 in 1924. This latter figure when stated in dollars of the value of 1890 is \$180,-900,000,000, or an increase of 178 percent in the amount of tangible wealth in the United States between 1890 and 1924. Does this substantial increase in the nation's wealth represent gains on the part of a favored few or does it also reflect the ability of the average citizen to increase his capital?

One of the best answers to this question is found in the growth in the amount deposited in the savings accounts of the nation's people. By "savings accounts" is meant money in accounts of the type that the depositor may be required to give thirty days' notice of intended withdrawal. Money deposited in commercial or checking accounts is not included.

In the last decade there has been an increase in the number of savings accounts from one for every eight persons to one for every three. At present there are approximately 25,000,000 families in the United States as compared with 39,000,000 individual savings accounts. In 1912 there was \$8,425,275,000 in the nation's savings deposits. The corresponding figure for 1924 was \$20,873,562,000. The latter figure stated in 1912 dollars has a purchasing power of \$13,776,550,920. This is an increase of 64 percent in the purchasing power of the savings deposits of the nation's people between 1912 and 1924. During the same period population increased approximately 18 percent. (See Chart VIII, page 248.)

This fund constitutes one of the important bases for the creation of new capital. Its existence is clear evidence that the rank and file of the nation's people are able to live well within their income, otherwise these accounts would not exist.

Another important form of national savings is represented by investment in life insurance. In 1924 the amount of life insurance outstanding in the United States was \$61,332,-058,237. Premiums were paid for life insurance in the same year to the amount of \$2,-082,815,282.

Figures as to savings deposits and payments on life insurance premiums indicate most people live well within their income and are able to devote substantial amounts to the building up of new capital.

There is also evidence, that industry has steadily increased its capital in recent years. The following table gives the amount of corporation surplus for the years following 1910.

TABLE 2. CORPORATION SURPLUS
1910 TO 1921

1910	\$1,200,000,000
1911	900,000,000
1912	900,000,000
1913	1,000,000,000
1914	500,000,000
1915	1,600,000,000
1916	3,900,000,000
1917	3,400,000,000
1918	1,700,000,000
1919	2,000,000,000
1920	1,000,000,000
1921	500,000,000

CHART VII

INCREASE *IN THE* NATION'S TANGIBLE WEALTH~1890 to 1924

Actual Wealth in Dollars

1890 \$65,087,081,000

1900 \$88,517,307,000

1912 \$86,299,664,000

1924 \$355,000,000,000

Wealth in 1890 Dollars

1890 \$65,087,081,000

1900 \$88,517,307,000

1912 \$152,426,997,818

1924 \$180,900,000,000

Research Division
National Education Assn.

Sources of data: *Estimated National Wealth, 1922* U.S. Bureau of Census. Wealth for 1924 estimated. Index numbers of wholesale prices, used in reducing dollars to 1890 value, from 1924 *Commerce Yearbook*, U.S. Department of Commerce

The significance of these figures is increased when one understands the definition of surplus, taken from the study in which they appear:

The surplus of a corporation is that amount of its net earnings which remains after the payment of all expenses, including the various classes of reserves, maintenance charges, taxes, and dividends.¹

Evidently, the payment of taxes including those paid for schools has not prevented the nation's corporations from saving a substantial proportion of their net income. The study referred to concludes that the savings or surplus of corporations "are far more than stabilizers of dividends in that they largely increase the power of the managements of corporations in guiding the growth of industries in this country."

Data comparable to those in the preceding table are not available as to the amount of corporation surplus for years following 1921. The figures of the United States Bureau of Internal Revenue based upon the income tax returns of all corporations in the United States in 1923, however, seem to indicate that the tendency shown in the preceding table was not peculiar to the pre-war period. The corporations of the United States in 1923 earned 9.12 percent upon their capital investments after

payment of all taxes—federal, state and local. The net incomes of the corporations of the United States in this year, with assets of \$73,422,791,000, was \$6,697,156,000 after deducting taxes.

Continued Business Expansion

The latest reports available offer no signs of any slowing up in our economic development. The November, 1926, issue of the *Federal Reserve Bulletin* states:

... the physical volume of industrial production . . . has been higher every month this year than in either 1924 or 1925 and for the past two months has been at a record level.²

The December, 1926, *Atlantic Monthly* prints an article which states:

... The United States, with over half the available gold supply, has a plethora of capital, which is constantly on the increase. Wall Street has become the world's banker, loaning to nations first according to their ability to repay and then according to their needs. In spite of vast amounts already given, the surplus of capital still exists.³

In the light of the above facts it cannot be contended that industry is finding it difficult to increase the capital at its command and to provide for substantial business growth.

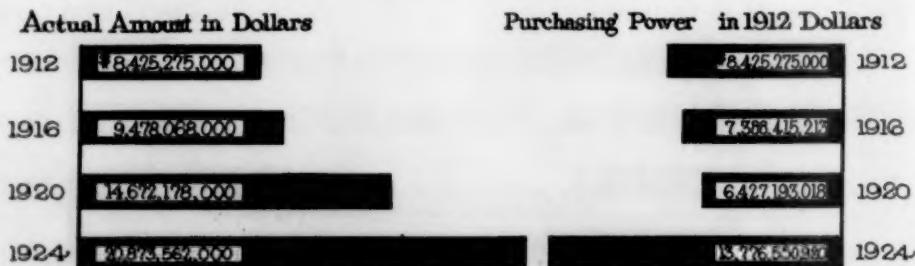
¹ Knaugh, Oswald W., "The Place of Corporate Surplus in the National Income," *Journal of the American Statistical Association*, June 1922, Volume XVIII, No. 138, p. 156.

² Page 759.

³ Page 823.

CHART VIII

INCREASE "AMOUNT" NATION'S SAVINGS ACCOUNTS



Research Division
National Education Assn.

Sources of data: *Savings Deposits and Depositors, 1912 through 1924*, compiled by American Bankers Association, New York. Index numbers used in reducing current dollars to 1912 dollars, from *1924 Commerce Yearbook*, U.S. Department of Commerce.

School Costs and Economy In Public Expenditures

Causes of the Growth in School Costs

School expenditures require but a minor fraction of the nation's income. Other major interests, probably of less importance to the general welfare than education, are being allotted much larger portions of the total income than goes for school maintenance. Increases in school costs have been accompanied by substantial growth in the nation's economic productivity and in the amount of its working capital. These facts offer no support for the claim that school costs are greater than the economic resources of the nation can bear.

These facts, however, do not offer a complete justification of present school expenditures. No service that the country supports, no matter how important to the general welfare it may be, has a right to claim a larger share of the nation's income than is necessary for its effective operation. This issue should be squarely faced as it relates to school costs.

Is the percentage of the nation's economic power allotted for the support of the schools greater than is necessary for their effective operation? When one contemplates the unusually rapid increases in the number of dollars spent for education in the last decade the inclination is to answer this question in the affirmative. Some would conclude after considering the figures of Chart X, on p. 253, that education is being extravagantly financed. An increase in ten years of 228 percent in the number of dollars expended for education seems large. But let us analyze the causes of this increase.

The principal factors contributing to the rapid growth of school costs since 1914 are:

1. The rapid increase in school attendance, particularly in the upper and more expensive grades
2. The depreciation in the purchasing power of the dollar
3. The increase in the amount, the kinds, and the quality of service demanded by society.

It is possible to measure the influence of these three factors in bringing about the

growth in school costs. Consider the increase in the cost of public elementary and secondary schools, which constitute approximately 80 percent of the expenditures for all schools. Public elementary and secondary school expenditures mounted from \$555,077,146 in 1914 to \$1,820,743,936 in 1924, or an increase of \$1,265,666,790.¹ How much of this increase is chargeable to each of the factors enumerated above?

Cost of Increased Attendance. Between 1914 and 1924 the total number of days' schooling provided in public elementary schools increased from 2,112,197,000 to 2,768,420,000, while the days' schooling provided in public high schools increased from 143,460,000 to 450,673,000. The growth in attendance was approximately eight times as rapid in high as in elementary schools.

This fact has an important effect on the burden placed upon the schools by increasing attendance. Every additional day's attendance in high schools costs approximately two and one-half times as much as an additional day's attendance in elementary schools.² Therefore, in arriving at a true indication of the financial burden placed upon the schools by attendance, a day's schooling provided in high school should count two and one-half times as much as one in elementary school.

When this principle is accepted, and the calculations are made, one obtains the number of *weighted days' attendance* in the public schools over a series of years. The figures as to weighted days' attendance are the same as days' attendance, as ordinarily understood, except that a day's schooling provided in high school is given two and one-half times as much weight as one provided in elementary school.

According to Table 5 the number of weighted days' attendance increased from 2,470,847,000 to 3,895,103,000 between 1914 and 1924. This is a 58 percent increase. Growth in attendance, therefore, justified an increase in school costs in this decade of 58 percent. Fifty-eight percent of \$555,077,146,

¹ Figures from U. S. Bureau of Education.

² Swift, Fletcher Harper. *Biennial Survey of Public School Finance in the United States, 1920-22*. Washington D. C. U. S. Bureau of Education, 1923, p. 5. (Bulletin 1923. No. 47.)

the cost of schools in 1914, is \$321,944,745. This is the part of the increase in school costs, between 1914 and 1924, chargeable to growing attendance. If this amount is added to the cost of education in 1914, the resulting sum is \$877,021,891.

Effect of Loss in Purchasing Power of Dollar. Between 1914 and 1924 the dollar depreciated in purchasing power until it would buy only as much as 61 cents purchased in 1914. In 1924 it required \$164 to buy as much as \$100 bought in 1914. Therefore, in in the decade following 1914, an increase of 64 percent in the number of dollars expended for schools was justified because of the depreciation of the dollar in purchasing power. This is in addition to the increase justified by growing attendance. Sixty-four percent of \$877,021,891, the figure given at the end of the last paragraph, is \$561,294,010. This is the increase in school costs justified by the depreciation of the dollar between 1914 and 1924.

Cost of Increase in Amount and Quality of Service. Between 1914 and 1924 increased attendance added \$321,944,745, and the depreciation of the dollar added \$561,294,010 to school costs. These sums plus the cost of public education in 1914 give a total of \$1,438,315,901. The difference between this amount and \$1,820,743,936, actually spent in 1924 for public elementary and secondary schools, or \$382,428,035, is chargeable to such factors, as the increase in the character and quality of service demanded from the schools. See Chart IX and Table 3.

It is evident that much of the increase of 228 percent in school costs between 1914 and 1924 is apparent rather than real. School

costs increased 228 percent only when measured by the discredited *dollars-spent* method, by which dollars which fluctuate in value are assumed to be stable in value. There is a better method of measuring changes in school costs. By this method, school expenditures in succeeding years are compared as to their *purchasing power per unit of service rendered*.¹ By this method the size of the job which a school system has to perform and the purchasing power of the dollars expended are accurately measured and kept on a comparable basis.

It would obviously be ridiculous to compare the expenditures of a school system having 2000 children with one having 4000 children without considering the difference in attendance. A similar thing is done in comparing 1924 school costs with those of 1914 without considering the difference in attendance. It is illogical to compare expenditures stated in dollars with a purchasing power of 100 cents with expenditures stated in dollars with a purchasing power of 61 cents. This is done when 1914 and 1924 school costs are compared without taking into account the depreciation in value of the dollar during this decade.

Errors such as these are avoided when one compares school expenditures in different years according to their purchasing power per unit of service rendered. This method is used in the calculations of Table 4. The last figure of column 9 of this table shows that between 1914 and 1924 school expenditures increased 27 percent in purchasing power per unit of service rendered. School boards had 27 percent more ability to buy services and materials necessary for the education of each school child in attendance in 1924 than in 1914.

¹ Norton, John K. "Standard of Living and Standard of Education—Have They Kept Pace?" *Journal of Educational Research*, January, 1926.

TABLE 3—ANALYSIS OF FACTORS CAUSING INCREASE IN PUBLIC SCHOOL COSTS, 1914 TO 1924

Year	Cost of public education—elementary and high schools	Increase over 1914	Amount of increase chargeable to		
			Increased attendance	Depreciation of the dollar	Other factors
1	2	3	4	5	6
1914.....	\$ 555,077,146				
1924.....	1,820,743,936	\$1,265,666,790	\$321,944,745	\$561,294,010	\$382,428,035

For interpretation for this table see notes at bottom of Chart IX, p. 257.

This increase of 27 percent is very different from the 228 percent increase indicated in Chart X.

A comparison of the decade increases in school costs calculated by both methods is given in Charts X and XI. In the first chart percentage increases in school costs are measured by the familiar but comparatively meaningless *dollars-spent* method. In the other chart the percentage increases in school costs are measured by their *purchasing power per unit of service rendered*.

In Chart XII the trend of school costs from 1914 to 1924 is traced. The upper line in this chart shows the trend of these costs by the dollars-spent method, the lower line indicates the trend according to their purchasing power per unit of service rendered.

It will come as a surprise to many that an increase in school expenditures from half a billion dollars in 1914 to nearly two billion dollars in 1924, a 228 percent increase in the number of dollars spent, has meant an increase of but 27 percent in the economic ability of school boards to provide school facilities for the children in attendance. The apparent large increases indicated by gross school ex-

penditures are largely accounted for by the rapid increase in school attendance, and by the depreciating power of the dollar to command human services and material goods.

Ability to Buy Versus Dollars Spent. School efficiency is largely dependent upon the ability of school boards to purchase the things necessary to school maintenance. The number of children to be educated and the purchasing power of the tax money appropriated should both be considered in comparing the sums expended by school officials. School boards have no power to reduce school attendance. When children report at a school door in America, state law requires their admittance. School boards have no power to restore to the 1924 dollar its prewar purchasing power. They must go into the open market and bid against other well-financed interests in purchasing the essentials for school maintenance.

An intelligent comparison of the school expenditures of today with those of preceding periods must, therefore, be based upon a measurement of the economic power of these expenditures to purchase in the open market those things essential to school maintenance.

CHART IX

ANALYSIS of FACTORS CAUSING INCREASE IN PUBLIC SCHOOL COSTS 1914 to 1924



- Expended for Public Schools in 1914.
- Increase over 1914 chargeable to increased attendance
- Increase over 1914 chargeable to depreciation in purchasing power of dollar
- Increase over 1914 chargeable to increased efficiency

*Research Division
National Education Assn.*

Read chart as follows: The increase in the cost of public elementary and high schools between 1914 and 1924 is chargeable to these factors:

1. Increased attendance—\$321,944,745. Attendance increased 58 percent during this decade. An increase of 58 percent over the cost of education in 1914 (\$555,077,146) is \$321,944,745.
2. Depreciation of the dollar—\$561,294,010. Growing attendance justified an increase of \$877,021,891. (\$555,077,146 plus \$321,944,745). In 1924, \$164 purchased the same amount as \$100 in 1914. Increasing \$877,021,891 by 64 per cent gives \$561,294,010.
3. Increased efficiency—\$382,428,035. Increased attendance and depreciation of the dollar added \$883,238,755, making a total of \$1,436,315,901. The difference between this and \$1,820,743,936, actually spent in 1924 for public elementary and high school education, or \$382,428,035, is chargeable to increased efficiency.

Based on figures of U. S. Bureau of Education and the National Industrial Conference Board.

When such a measurement is made we see that the economic ability of school boards to maintain school facilities of a given quality was 27 percent higher in 1924 than in 1914.

Increasing Support for Schools a Consistent Policy. Chart XI indicates each decade since 1880 has shown an increase in the economic power of school boards to provide children with good school facilities. The money at the command of school boards had 51 percent more purchasing power per child to be educated in 1890 than in 1880. The percentage increases during the four subsequent decades are seven, eighteen, twenty-four, and twenty-seven.

The 27 percent increase, between 1914 and 1924, in the ability of school boards to provide for school maintenance is the continuance of a consistent policy on the part of the American people. Each succeeding decade has brought an increase in the facilities with which to educate each American child.

This tendency will probably continue so long as the burdens placed upon the school continue to increase. At one time in our history, the schools enrolled selected children who

learned readily. Now the schools enrol children of varying mental and physical equipment. Democracy demands that the particular kind of training be given each child which will best develop his talents. This requires the organization of the relatively expensive classes for the mentally and physically handicapped, and other special groups, the development of differentiated courses of study, and the training of special teachers.

At one time in our history the school's work was done when a few of the brighter children were placed in possession of a few simple skills, principally the three Rs. Now the demand is made that all children shall come into effective use of these tools. In addition, the school is expected to fit the child for effective citizenship, to inculcate the habits of thought and conduct that constitute good character, and to lay the foundations for success in the vocations.

The realization of these objectives calls for better equipped schools than those of the past. Untrained, transient teachers, and meagre equipment will not suffice. Teaching must enlist people of first rate ability and training

TABLE 4—ANALYSIS OF INCREASES OR DECREASES IN PUBLIC SCHOOL EXPENDITURES PER UNIT OF SERVICE RENDERED 1914 TO 1924

School year	Expended for public elementary and high schools	Aggregate days schooling provided in public elementary and high schools	Weighted aggregate days schooling provided in public schools	Expended for each weighted day's attendance (cents)	Purchasing power of dollar on 1914 base	Purchasing power of expenditures per weighted day's attendance (cents)	Expenditures for public elementary high schools	
							Percent increase following 1914 in amount expended	Percent increase or decrease following 1914 in purchasing power per unit of service rendered
1	2	3	4	5	6	7	8	9
1914	\$555,077,000	2,255,657,000	2,470,847,000	22.4	100	22.4		
1916	640,717,000	2,461,407,000	2,725,393,000	23.5	92	21.6	15	4 decrease
1918	763,678,000	2,498,424,000	2,794,112,000	27.3	63	17.2	38	23 decrease
1920	1,036,151,000	2,615,161,000	3,014,888,000	34.4	51	17.5	87	22 decrease
1922	1,580,671,000	3,034,907,000	3,597,579,000	44.0	64	28.2	185	26 increase
1924	1,820,744,000	3,219,093,000	3,895,103,000	46.7	61	28.5	228	27 increase

Read table as follows: In 1916 \$640,717,000 was expended for public elementary and high schools (column 2). The aggregate days' schooling provided in this year in public elementary and high schools was 2,461,407,000 (column 3). The weighted aggregate days' schooling provided was 2,725,393,000 (column 4). This figure is the same as that in column 3, except that the number of days schooling provided in high schools is given two and one half times as much value as the days of schooling provided in elementary schools. The percent of aggregate days attended by all pupils, which was high school attendance, is estimated on the basis of the enrolment figures, since attendance figures segregated for elementary and high schools are not available. There was 23.5 cents expended in 1916 for each weighted day's attendance (column 5). The dollar in 1916 purchased the same as 92 cents purchased in 1914. When this factor is taken into consideration the purchasing power of expenditures per weighted day's attendance is 92 percent of 23.5 cents or 21.6 cents (column 7). From 1914 to 1916 school expenditures stated in dollars increased 15 percent. Over this same period the purchasing power per unit of service decreased 4 percent (column 9). Similarly read data for other years.

Calculations based on figures of U. S. Bureau of Education and the National Industrial Conference Board.

CHARTS X AND XI

PERCENTAGE INCREASE BY DECADES IN NUMBER OF DOLLARS EXPENDED FOR PUBLIC ELEMENTARY & HIGH SCHOOLS

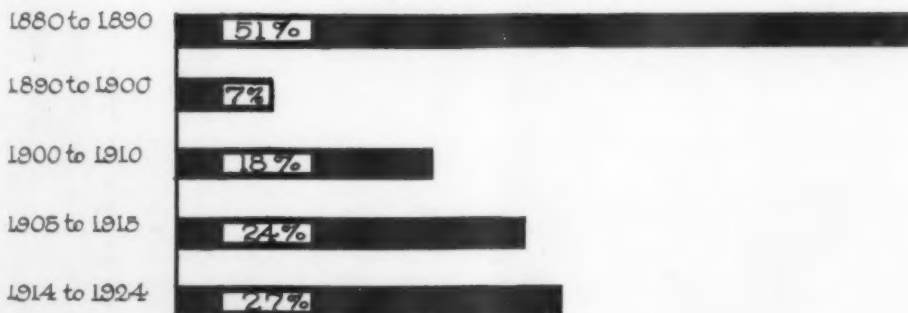


*Research Division
National Education Assn.*

Read chart as follows: Between the years of 1880 and 1890 the cost of public elementary and high schools increased 80 percent. Similarly read data for other decades.

Calculations based on data of U.S. Bureau of Education.

PERCENTAGE INCREASE BY DECADES IN PURCHASING POWER OF SCHOOL EXPENDITURES PER CHILD ATTENDING



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Read chart as follows: Between the years of 1880 and 1890 the purchasing power of school expenditures per child attending increased 51%. Similarly read data for other decades.

Calculation based on figures of U.S. Bureau of Education, U.S. Department of Labor and National Industrial Conference Board.

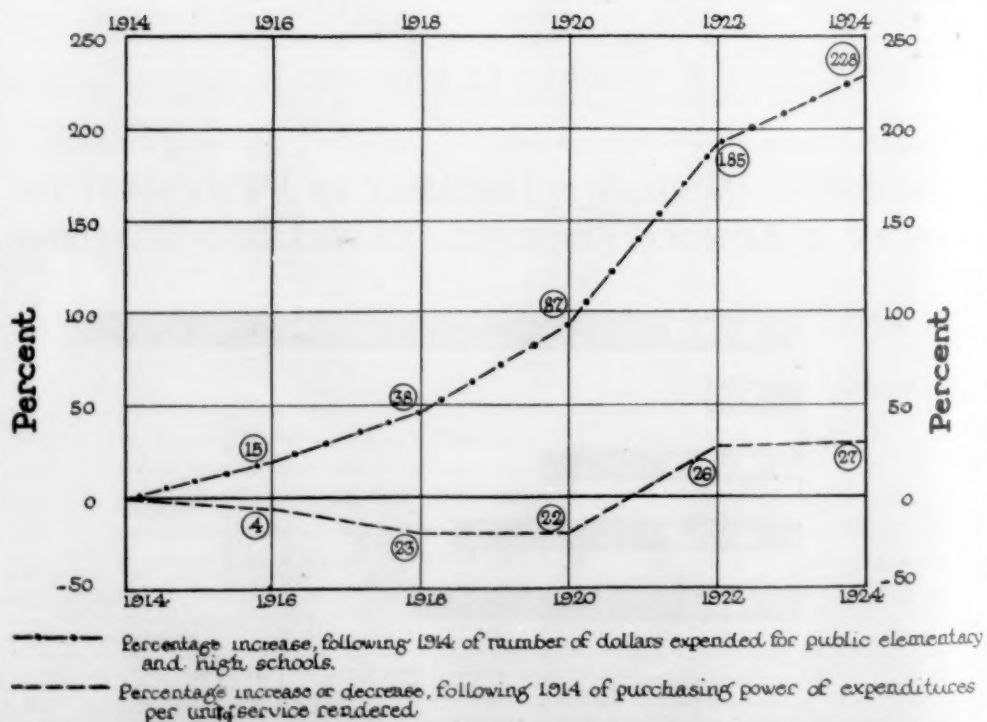
who look upon their work as something more than a transient calling. If the school is to offer a chance to practice life under conditions that are ideal for acquiring habits and attitudes that make for individual and social efficiency, the school plant must provide all the equipment demanded by civilized life on a high level.

All of these things cost money. So long as the public continues to demand increases in the amount and quality of service rendered by the schools, it must be willing to pay the cost. An increase of 27 percent in school expenditures between 1914 and 1924 for the purpose of increasing school efficiency is none too much when one considers the higher and higher type of product the public and developing civilization demand that the school shall turn out.

It is none too much when one considers the revelations of the war as to the extremely low level of efficiency upon which many schools were operating. One man in every four in the draft was unable to read English with reasonable facility. On top of this fact came the figures of the 1920 census enumerating millions of native-born American citizens who had had "no schooling whatever." Nearly a million and a half children over seven and under fourteen years of age were counted who had not attended school a day during the school year in which the census was taken. Standards for physical examination in the army draft were lowered, yet one man in six was rejected as unfit for any type of military service. Illiteracy, non-attendance, physical deficiency—these are not the products of adequately financed schools.

CHART XII

TREND of PUBLIC SCHOOL COSTS in the UNITED STATES



Read chart as follows: the number of dollars expended for schools was 15% greater in 1916 than in 1914, 38% greater in 1918 than in 1914, etc. The purchasing power of school expenditures per unit of service rendered was 4% less in 1916 than in 1914, 23% less in 1918 than in 1914, etc.
 Data calculated from figures of U.S. Bureau of Education and of the National Industrial Conference Board.
Research Division National Education Assn.

A proper consideration of the facts justifies the conclusion that the increases in school costs of the last decade have been none too large. Present school expenditures can be fully justified under a policy of economy and efficiency in public expenditures.

Economy in Federal Expenditures and School Costs

Since the war there has been a rapid reduction in the expenditures of the federal government. Some have demanded similar decreases in school expenditures. It has been contended that since the President's economy campaign has resulted in reductions in federal expenditures, school expenditures should be reduced.

This attitude assumes that the only way to exercise economy is to reduce expenditures. This assumption is shortsighted. Increases rather than decreases in some instances are the wisest sort of economy. This was pointed out by President Coolidge in a recent address to the Business Organization of the Federal Government when he said:

... the greatest emphasis should be placed on constructive economy. Merely to reduce the expenses of the Government might not in itself be beneficial. Such action might be only the discontinuance of a wholly necessary activity. No civilized community would close its schools, abolish its courts, disband its police force, or discontinue its fire department. Such action could not be counted as gain, but as irreparable loss. The underlying spirit of economy is to secure better education, wider administration of justice, more pub-

lic order, and greater security of conflagration, all through a superior organization which will decrease the unit of cost.

The spirit of this statement offers little support for the penny-wise and pound-foolish attitude of those who have insisted that absolute reductions in total school expenditures and economy are synonymous. Such reductions in many communities would result in seriously crippling the schools—wastefulness of the worst order.

Comparison of Effect of War on National and School Expenditures

There has been a reduction in federal expenditures since the war. It is natural to ask why school expenditures cannot be similarly reduced. The answer is that during the war period the expenditures of the national government were necessarily far in excess of ordinary peace time demands. The opposite was true of school costs. Federal* expenditures have been reduced principally by eliminating war activities. The schools have had no war costs to eliminate.

The total expenditures of the federal government chargeable against ordinary receipts jumped from \$735,081,431 in 1914 to \$18,952,141,180 in 1919.¹ This was a 2478 percent increase in four years. Such an increase was unprecedented, but necessary if the war was to be successfully prosecuted.

As soon as the war was over federal expenditures were rapidly reduced from \$18,952,141,180 in 1919 to \$3,404,295,067 in 1924.¹

¹ Figures from *Receipts and Expenditures of the United States Government by Fiscal Years from 1791 to 1925*. Division of Bookkeeping and Warrants, U. S. Treasury Department. Form 778.

FEDERAL EXPENDITURES for normal functions of government have not declined.

On the contrary, they have grown in the last five years. The reduction in Federal taxes has come about through the cleaning up of war-time finances and extraordinary war-time expenses. Only a scandalous disregard of ordinary financial prudence could have prevented an inevitable reduction in Federal taxes upon the resumption of peace. The states, on the other hand, had relatively few unusual expenses as a result of war. Most of them had practically none, beyond local aid to disabled veterans. But state expenditures naturally grow with the passing years, as population increases and life grows more complex. State expenditures ought to increase. Not all additions to local expenses are wise, but by and large they reflect the growth of prosperity and an intelligent widening of local interest in the welfare of the community. They spell better roads, better schools, better hospitals, better care of children and of the public health, more parks, more libraries, more museums of art.

Not size of expenditures, then—not even, necessarily the relative tax rate year by year—but wisdom, is the true test. *World's Work*, December, 1926, p. 119.

The effect of the war on school costs was very different. During the war period school expenditures were considerably less than they would have been had peace prevailed. In 1918 and the years following, thousands of children attended school on half-time, the number of children per teacher was increased beyond the desirable maximum, and school building programs were reduced to the lowest possible minimum.

Expenditures were reduced until school efficiency was seriously threatened.¹ Hundreds of schools actually closed their doors because no teachers were obtainable.

In the case of the federal government it has been constructive economy to reduce expenditures rapidly by eliminating war activities. In the case of the schools it has been constructive economy to increase costs so pre-war standards of efficiency could be restored.

Table 5 gives data as to total ordinary expenditures of the federal government in 1914 and 1924. The sums given do not include payments on the public debt.

School costs were 3.28 times as great in 1924 as in 1914. The ordinary expenditures of the federal government were 4.63 times as great in 1924 as in 1914. This as well as the additional fact that school population increased considerably more rapidly than general population between 1914 and 1924, indicates that, if economy has marked the control of federal expenditures since the war, it has also been a characteristic of school expenditures.

The decrease in federal expenditures, for which the elimination of war activities has been principally responsible, releases large supplies of economic energy which may now be used for school support and other productive enterprises. In 1919 the federal government expended nearly nineteen billion dollars largely for war purpose. These expenditures were paid for by the same people who support the schools in state and local communities. It should not be difficult for a people capable of spending such a tremendous sum for war to provide two billion dollars for education.

Putting First Values First

School costs are not greater than the economic power of the nation will justify. Recent increases in school costs are not out of harmony with a policy of constructive economy in public expenditures.

The existence of these facts may simplify, but they do not solve the problem of securing adequate school revenue. Human desires are never fully satisfied. The more we have the more we want. We cannot have everything we want and still have plenty left for the schools. If we provide for everything else before we think of the children, there will be nothing left for education. If the sums essential for the effective operation of the schools are to be provided, choices must be made. The mere existence of tremendous stores of economic energy is no guarantee that the

¹ Norton, John K. "Standard of Living and Standard of Education—Have They Kept Pace?" *Journal of Educational Research*, January, 1926, p. 28.

TABLE 5—INCREASE IN ORDINARY EXPENDITURES OF FEDERAL GOVERNMENT AND SCHOOL COSTS, 1914 TO 1924

Item	1914	1924	Percentage increase
1	2	3	4
Expenditures of Federal Government.....	\$735,081,431	\$3,404,295,067	363
Public Elementary and High School Expenditures	\$555,077,146	\$1,820,743,936	228

Figures for expenditures of Federal Government are total expenditures of Federal Government chargeable against ordinary receipts as given in *Receipts and Expenditures of the United States Government by Fiscal Years from 1791 to 1925*. Division of Bookkeeping and Warrants, U. S. Treasury Department, Form 778. These figures are exclusive of expenditures to retire the public debt.

Figures for expenditures for education are from U. S. Bureau of Education and include costs for current expense and capital outlay, but exclude payments for debt service.

schools will be adequately supported. If we want more education, we must be content with something less in the way of luxuries and necessities than we would consume if there were no economic limitations.

Few will challenge these truths as long as they are kept on a theoretical basis. Protests are heard, however, as soon as the practical applications begin. The purveyors of luxuries, the manufacturers of automobiles, the building contractors and other commercial interests want to increase the size of their profits as rapidly as possible. The fact that we may already be consuming as many luxuries and automobiles as we need is a minor consideration. "Another record year in building construction" is the slogan whether we need a record year of building or not.

Here is the basis of the opposition to the development of a modern program of taxation, which is essential to adequate school support. The fact that a tax on the net profits of business concerns is generally recommended by taxation authorities as an essential feature of a modern taxation system is given scant consideration. It might reduce immediate business profits. Hence it is opposed.

It is perfectly natural that the individual owners of business concerns should be anxious to increase their dividends and surpluses as rapidly as possible. This is merely another way of saying that the more wealth a person has the more he wants. This natural human desire, however, is insufficient basis for claiming the general economic welfare of the nation demands a reduction in school costs that private industry may have more surplus at its disposal.

The interference with immediate business profits involved in setting aside the depreciation fund which we call school costs is very small. No one can doubt this after studying the data on page 241.

More and more of our enlightened business concerns are looking upon taxes paid for school support as a contribution to a depreciation fund which it is disastrous to neglect. Without the high level of intelligence which results from the work of the school, our present industrial organization would be impossible, both from the point of view of production and of consumption. Illiterates are poor producers as well as poor buyers.

The amount spent for education is really a minor issue. It is important only as it affects a major issue—the efficiency of the schools whose product is education. If schools are so organized that their products are sound, we need not worry about their cost. Every dollar spent will return many fold in increased economic productivity and in other more important values.

Scientific discovery, machine production, and growth in general level of educational attainment should result in constant decreases in the percentage of our economic energy devoted to the production of material goods. Education in all its ramifications should become our chief industry—the one which contributes most to the production of human happiness. We should rejoice at every decrease in the percentage of the nation's energy required by the field and shop and take satisfaction from the resulting increases in the amount of energy available for education.

Now that the people of the United States have mastered the art of production, is it not time they began to acquire the art of consumption? Should we continue to devote the best part of our energy to the production of the material goods of life when we are already producing more than we can worthily consume?

IN THE LIGHT of the facts regarding the elasticity of human wants and capacity for consumption, there can be no denial of the reality of the limitations upon expenditures imposed by the relative scarcity of resources. The community simply cannot produce all it would like to consume and it cannot continue, over an extended period, to consume more than it produces. It may desire an educational product which involves larger expenditures, but it also desires more automobiles, more motor roads, better houses and clothing, and many other things. A selection is necessary—a selection based upon the value which the community attaches to each of these various products.—*Strayer and Haig, The Financing of Education in the State of New York, page 146.*

Conclusions Drawn From Facts Presented

This bulletin has presented figures as to the ability of the United States as a whole to support its schools. Facts were presented from which these conclusions may be drawn:

1. A minor fraction of the economic power of the United States is devoted to school support.

2. A number of important national interests are allotted portions of the nation's economic power considerably larger than that used for school support.

3. There has been a tendency extending over a long period of years to increase the percentage of the nation's economic power allotted for school support.

4. The tendency of the nation to increase the percentage of its economic power allotted for school support has been accompanied by substantial increases in economic productivity and in the total amount of capital.

5. There is no basis for the contention that increasing school expenditures have prevented rapid economic expansion in the United States. The volume of production and the amount of capital available have both substantially increased during the last decade.

6. Most of the increases in school costs in the last decade were due to the rapid growth in school attendance and to the loss in purchasing power of the dollar.

7. The increase during the last decade in the purchasing power of school expenditures per child to be educated was not unusual. Comparable or larger increases have occurred during every decade for which records are available.

8. Present expenditures for education are no larger than is necessary for the effective operation of the schools. Present school costs are not out of harmony with a policy of economy and efficiency in public expenditures.

... WITH EVERY ADVANCE in the state of "civilization," collective activities rise with it, as one is in large measure a reflection of the other. Increasing amounts spent on education in its broadest sense, on good roads, recreation, improved methods of public protection and sanitation, etc., are in themselves the criteria of relative progress and welfare. . . . —National Industrial Conference Board, *Cost of Government in the United States, 1926*, p. 83.

AFTER EVERY great war abnormal expenditures can be reduced, but at the same time there is an opposing tendency of normal expenditures to increase due to the growth of the country and the increase in governmental activities.—*Excerpt from statement of Secretary Mellon, U. S. Treasury Department, November, 1926.*

Research Bulletin
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(For index see page 261)

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