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National Education Association

**Taking Stock
of the Schools**

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Material for American Education Week

The National Education Association, Washington, D. C., in current issues of the Journal has issued material of particular value to those observing American Education Week.

In this Bulletin will be found facts valuable in answering the questions: Are the Schools Costing Too Much? Are the Schools Getting Results? Also see page 100 of this Bulletin.

Research Bulletins previously issued for Education Week contain material that is still of current value. These bulletins are now out of print, but copies should be available in local school or city libraries. Ask for *Five Questions for American Education Week*, Research Bulletin, Vol. 1, No. 4, September, 1923, and *Facts On the Public School for American Education Week*, Vol. II, No. 4, September, 1924.

The U. S. Bureau of Education, Washington, D. C., issues valuable material for use in connection with American Education Week. See page 103 of this Bulletin for list of material available.

American Legion Posts have special material available and are cooperating in the observance of the week.

State Departments of Education, in a number of states, are now issuing pamphlets containing material of especial interest to the particular states concerned.

Any activity is appropriate for American Education Week that results in a better understanding of the public school as an instrument of progress in a democracy. All the activities of the Week should emphasize and be built around this central theme.

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FOREWORD

THE AMERICAN Public School is joint guardian with the home and the church of those intellectual and moral ideals upon which all real progress must be based. It is indeed a heavy responsibility shared by modern education.

Forces released by the industrial and scientific revolution of the last century are striking at the very foundations of the nation's spiritual life. The fear is expressed by some that the wholesome standards of thought and conduct characteristic of American life are being irreparably undermined.

Is this fear to be fulfilled? The answer cannot be certain. But it can be said with certainty that safety can be purchased only by increasing the share of human energy which goes into the spiritually-constructive forces which determine a nation's moral stamina.

But there are those who say we cannot afford to have better schools. They are wrong. In this bulletin facts are presented that cannot be denied. We can continue to provide for education on the present basis, or on a more generous basis if it seems wise, without threatening any essential feature of our economic life. This fact cannot be made too clear. It is one that needs to be emphasized not only during Education Week, but throughout the year. We should not rest until the facilities of the schools are completely adequate to the heavy burden placed upon them.

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

Are the Schools Costing Too Much?

The costs of public education have increased rapidly in the last decade. They nearly doubled between 1915 and 1920. They nearly doubled again between 1920 and 1925. No better evidence could be cited to demonstrate the faith of the American people in the public schools. It is true that much of this unusual increase in costs can be explained by the loss in value of the dollar and by rapid growth in school attendance particularly in the upper and more expensive levels. But these factors do not wholly account for the increases.

The American people during the last decade have provided for school support resources beyond those demanded by the depreciated dollar and increasing attendance. In substance they have said, "We have faith in the public school which we have created. Its work is essential to present welfare and future progress. We not only want it to continue to do its work, but we want it to be able to do it better than has been possible in the past." But approval of increasing school support has not been unanimous.

Some say that the schools are costing too much. It is contended that the economic strength of the nation is not sufficient to bear current school costs. We have been told that education "must reckon with economic necessity," and that educational expenditures are "more than the public can bear." National bankruptcy is predicted if school support is continued on the present basis.

Are these fears justified? If they are, there is need for positive and immediate action. Economic deterioration would be a heavy price to pay for too rapid an expansion of educational activities. But if these fears are groundless, the imaginings of the type of mind which has throughout history protested at every extension of education, then they should be so recognized.

School Costs and Bankruptcy

Those who maintain that school costs are leading to bankruptcy usually take no note of the fact that education is probably the most

productive force that civilization has created. They look upon education solely as consuming economic energy and disregard the fact that each dollar spent for education returns several fold in terms of greater productive power.

But let us meet these one-sided reasoners on their own ground and think of education only as consuming economic energy, disregarding for the present its productive side. It is true that provision for education involves a levy upon the nation's total supply of economic energy or income, that is, its ability to produce goods and to perform service. The total amount a nation can spend for bread, for shoes, for education, and the other goods and services it consumes, is limited by its total supply of economic energy. There is no magic source from which school costs can be drawn. They represent a levy against the nation's total income.

School costs could result in national bankruptcy either by consuming all of a nation's economic energy or by consuming such a large part of it that there would be an insufficient share left for other essential needs. If a nation's supply of economic energy or income were worth ten billion dollars a year and it expended twelve billion dollars for schools, the nation would soon be bankrupt. Again, if a nation's income were ten billions, its school costs five billions, and eight more billions were required for other basic needs, the nation would soon be bankrupt. It would be consuming more than it could produce or pay for. In such a case, it might fairly be asserted that school costs were leading to bankruptcy and were greater than society could bear.

Do either of these situations exist in the United States? Do school costs require more than our total supply of economic energy, or such a large part of it that there is insufficient left to provide for other basic needs? These questions may best be answered in the light of the facts. First, we need to know how much economic energy the United States has to draw upon.

How Much Economic Power Has the United States?

The measures of economic power most commonly used are wealth and income. By wealth is meant tangible property such as lands, buildings, transportation systems, and machinery. The total value of a nation's tangible property is its wealth.

Income is the supply of goods or services that can be commanded and used during a specified period of time. A nation's income is the aggregate of the incomes of the people which compose it.

Recent and reasonably reliable estimates, both of the nation's wealth and income are available. The accumulated wealth of the United States in 1922 was \$320,803,862,000.¹ The yearly income of the people of the United States is somewhere between sixty and seventy billions. It is safe to say that the yearly income of the American people, at present, averages close to \$65,000,000,000.²

How Much Are We Spending for Education?

The cost of public elementary and secondary schools in 1922, the last year for which complete figures are available, was \$1,580,671,296.³ To this must be added the cost of higher education and other forms of education not included in this figure. When this is done, the total cost of public—that is, tax supported—education in the United States in 1922 is estimated to have been \$1,799,383,894.⁴

¹ *Estimated National Wealth, 1922*, United States Department of Commerce, Washington Government Printing Office, 1924, p. 18.

² Based on estimates of the National Bureau of Economic Research and the National Industrial Conference Board.

³ Figure taken from *Statistics of State School Systems, 1921-22*, United States Bureau of Education, Bulletin 1924, No. 31, p. 2.

⁴ Based on estimates of United States Bureau of Education reported in *Tax Burdens and Public Expenditures*, National Industrial Conference Board, New York, 1925, p. 48.

National Resources and the Cost of Education

It is clear from these figures that the support of education requires but a small tax on our wealth. A levy of fifty-six hundredths of one per cent on the nation's total wealth would cover the cost. The significance of this figure may be better understood by assuming that contributions to the support of education are directly proportional to the amount of tangible property owned. On this assumption, the present cost of education would require a man with property worth \$1,000 to pay \$5.60 for the support of public schools each year. This would be the same as a 5.6 mill tax, or a tax of 56c on the hundred dollars. Such a levy on property would completely cover school costs without other taxes of any kind. In the table one may quickly ascertain what the ownership of property of a given value at the present time means, on the average, in terms of the cost of public education.

One may interpret these figures for himself. If, for example, a payment of \$28.00 for the support of education for each \$5,000 worth of property in existence is more than the economic resources of the country will allow, then the fear that present educational costs threaten national bankruptcy is justified. If such an expenditure for education can easily be met without threatening bankruptcy, then this fear is unjustified.

The nation's average annual income is approximately \$65,000,000,000. Education costs

NO OTHER nation cherishes so unwavering a faith in education as do we Americans. No other nation has shown itself so willing to pour its money and energy into all sorts of educational experiments. We believe that the strength of the nation is measured not by armies and navies and fortifications, but by schools—schools for all the children of all the people, adapted not to one type of mentality, but various enough to meet the needs of all.

If America means anything, it means that the individual shall have secured to him his inalienable right to development through education of whatever talent he may have been endowed with, regardless of the quality or the quantity of the endowment. There can be no other meaning to education in a democracy. Any kind of aristocracy, even an intellectual aristocracy, meaning the selection for higher training of a certain type of mental ability, is snobbish and un-American.—Frank D. Boynton, *Journal of the Minnesota Education Association*, April, 1925, p. 4.

TABLE I.—AMOUNT EXPENDED FOR SUPPORT OF PUBLIC EDUCATION IN THE UNITED STATES PER GIVEN AMOUNTS OF TANGIBLE PROPERTY IN EXISTENCE, 1922.

Value of tangible property	Amount expended for education per given value of property	Rate in mills	Rate per \$100 valuation
1	2	3	4
\$ 1,000	\$ 5.60	5.6	56c
2,500	14.00	5.6	56c
5,000	28.00	5.6	56c
10,000	56.00	5.6	56c
25,000	140.00	5.6	56c
50,000	280.00	5.6	56c
100,000	560.00	5.6	56c
1,000,000	5,600.00	5.6	56c

Read table thus: For every \$1,000 of tangible property in existence in 1922, \$5.60 was expended for the support of public education, etc. A 5.6 mill tax, or a tax of 56c on the \$100 of tangible property, would alone cover the cost of all public schools. Calculations based on estimates of U. S. Bureau of Education, and U. S. Department of Commerce.

\$1,799,383,894. Therefore, for every \$5,000 worth of income enjoyed, \$138.50 is expended for the support of public education. A sum that represents 2.77 per cent of our income would entirely pay the cost of the schools.

The figures cited show that education con-

sumes but a minor fraction of our total supply of economic energy. We may readily dismiss the fear of bankruptcy because school costs threaten to swallow up the nation's total income. If the fear that school costs are more than society can bear is to be substantiated it must be based on evidence that the continuance of costs on the existing level will involve a general economic retrenchment.

Are there basic economic needs that are denied a proper share of our income because of school costs? Is there a shortage in the amount of economic energy needed to produce the material necessities of life—food, shelter and clothing? Is the nation living on its accumulated capital so that the value of its material wealth is decreasing? Does the individual citizen find it difficult to save and to make adequate provision for his future? Would a reduction in school costs make possible a significant increase in the provision made for such basic needs as these? Such are the questions that need to be answered. If the answers are affirmative, then it may justly be stated that school costs are more than the nation can bear; that we must either fail to provide for basic needs or else go into bankruptcy as a result of spending more than we can earn.

CHART I

IS THE COST OF PUBLIC EDUCATION MORE THAN SOCIETY CAN BEAR?

Accumulated
National Wealth
1922—\$ 320,803,862.00

Average Yearly
Income of
United States
\$65,000,000,000

Cost of all Public
Education
1922—\$ 1,799,383,894

*Reprinted from
National Education Assn.*

Wealth Data from U.S. Department of Commerce; Income Data from National Bureau of Economic Research; Cost of Education from U.S. Bureau of Education.

Do School Costs Prevent the Production of an Adequate Supply of the Material Needs of Life?

If society is to continue on a civilized level there must be provision for an adequate supply of the basic essentials of life—food, shelter, and clothing. A great war, by claiming an undue proportion of a nation's supply of economic energy, might make it impossible to produce an adequate supply of these basic needs. School costs by expanding too rapidly might achieve a similar result.

Have school costs interfered with the production of an adequate supply of the material necessities of life? The value of agricultural products in 1913 was \$9,850,000,000 and in 1923, \$16,634,000,000, or an increase of 68.87 per cent. The value of manufactured products in 1913 was \$24,246,434,724 and in 1923, \$60,555,998,200, or an increase of 149.75 per cent.¹ Part of these increases are fictitious

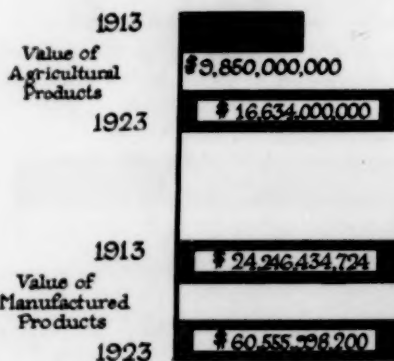
and represent depreciation in the value of the dollar.

When the depreciation of the dollar is allowed for, however, there is still a substantial growth in these industries during the decade being considered. The combined value of agricultural and manufactured products in 1913 was \$34,096,434,724, in 1923 the corresponding figure was \$77,189,998,200. The purchasing value of the dollar of 1923 compared with that of 1913 was fifty-eight cents according to the figures of the United States Bureau of Labor Statistics. The production of 1923 would have been worth approximately \$45,000,000,000 if the dollar had retained its 1913 purchasing power. There was, therefore, a real increase of 32.4 per cent in the value of agricultural and manufactured products between 1913 and 1923. This may be compared with a growth in population during the decade following 1910 of 14.9 per cent.

¹ These estimates are those of the Department of Agriculture, Bureau of Markets and Crop Estimates and U. S. Census, Manufactures Division.

CHART II

INCREASE IN VALUE OF AGRICULTURAL AND MANUFACTURED PRODUCTS 1913 to 1923



Research Division
National Education Association

Data From *Estimates of U.S. Department of Agriculture and Bureau of Census.*

Billions are available each year for building construction. The cost of building construction in the United States in 1924 was \$6,012,000,000. This is three times the cost of all public education. The tremendous increase in the amount of economic energy available for building construction is indicated in Table 2 in which the value of the dollar is stabilized.

The increase in the amount expended for building construction in recent years has been so great that it has been suggested that we have reached a new plane of construction demand "and that the higher level represented in the last three years is more or less permanent."¹

The people of the United States enjoy greater material comforts than those in other sections of the world. Available facts indicate that in recent years there has been no loss in the ability to command these comforts. Increasing school costs have not interfered with a substantial growth in the nation's ability to produce the basic material needs of life.

Our yearly expenditures for all public education constitute but 2.33 per cent of the value of agricultural and manufactured products. School costs each year are less than one-third

the amount expended in building construction. If all of the support going to the schools were diverted to the production of agricultural and manufactured products, the amount produced would be increased but 2.33 per cent. Any fear therefore that increasing educational costs threaten the American standard of life—that is, the ability to enjoy a full measure of creature comforts—is groundless.

But a nation might be able to command a generous supply of material goods and still be economically unsound. It might temporarily live on its capital. In which case, the final reckoning would be delayed, but would be none the less inevitable.

Are School Costs so Great that the Nation Is Unable to Increase Its Capital?

A nation that is on a sound economic basis is usually able to increase its supply of capital. A nation's capital is its supply of material wealth—land, buildings, transportation systems, machinery—the instruments of production. A nation's capital is the foundation upon which its productivity rests.

Has the United States been able to increase its capital in recent years? This question is

¹"Are We on a New Plane of Construction Demand?" *Engineering News-Record*, August 27, 1925, p. 367.

TABLE 2.—PER CAPITA CONSTRUCTION IN U. S. REDUCED TO 1913 PURCHASING BASIS

	Average 1913 to 1921	1922	1923	1924	1925	Average 1922 to 1925
1	2	3	4	5	6	7
Residential.....	\$ 5.55	\$ 9.40	\$ 8.89	\$ 9.72	\$10.16	\$ 9.54
Industrial.....	1.12	2.13	2.14	1.68	2.04	2.00
Other buildings.....	4.60	7.83	5.49	6.41	8.00	6.93
Other construction.....	4.61	6.39	6.57	7.11	8.18	7.06
Total.....	\$15.88	\$25.75	\$23.09	\$24.92	\$28.38	\$25.53

Data from "Are We on a New Plane of Construction Demand?", *Engineering News-Record*, August 27, 1925, p. 367.

THERE ARE almost no bounds to be set to the possibilities of education of the future. We may as well accept the proposition that there is going to be continually more spent for education, for it will be an ever better education. Inasmuch as the world tests a country's civilization not by the amount spent for its battleships, but by the sums spent for education, this feature of the problem will constantly acquire greater significance.—*Edwin R. A. Seligman, Home School and Community, April, 1925.*

answered best by the figures of the Federal Census of Wealth, which estimates the value of the nation's tangible property, or capital. The wealth of the United States according to recent federal estimates was as follows:

1900— \$88,517,307,000
1912—\$186,299,664,000
1922—\$320,803,862,000

Part of the increase between 1912 and 1922 is fictitious, since it is measured in terms of a depreciating dollar. When this factor is eliminated, however, there is evidence of a substantial increase in the real wealth of the nation during recent decades. The foreword of the volume of the Department of Commerce entitled *Estimated National Wealth* in considering the increase in wealth between 1912 and 1922 states:

If, then, wealth increased 72 per cent, while the index of prices increased only 55 per cent, we would conclude that the actual increase in the physical wealth of the United States was in the ratio of 172 to 155, which would indicate a growth of about 11 per cent during the decade.

This increase, whereas not so large as in the preceding decade, is probably more sig-

nificant, however, when one considers that between 1912 and 1922 the United States was one of the participants in the World War which destroyed millions of dollars worth of wealth. The report referred to above states:

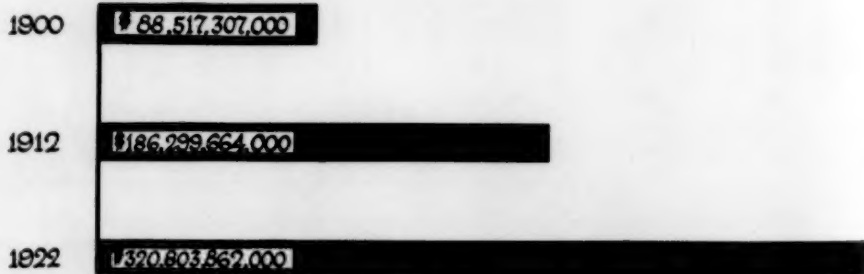
When we consider that during two of these ten years a large part of the productive activities of the nation were devoted to the production of materials destroyed in war, we need not consider an increase of even 11 per cent at all discreditable.

Apparently, the per cent of our economic energy available for the increase of the nation's wealth and capital is sufficient under normal circumstances, those existing in times of peace, to make possible a steady, in fact, a rapid growth in the nation's tangible wealth. This conclusion is supported by a recently published study which estimates the net savings made by the people of the United States during the decade 1909 to 1918.

During the decade 1909 to 1918, the United States was able to save a substantial part of its income in each year except that in which we were engaged in the war. It is estimated that during these years the nation saved an average of 15.6 per cent of its income.

CHART III

INCREASE IN VALUE of the NATION'S TANGIBLE WEALTH



Research Division
National Education Association

Figures from *Estimated National Wealth: 1922 United States*
Bureau of Census p.16

TABLE 3.—PERCENTAGE OF NATIONAL INCOME SAVED 1909 TO 1918¹

Year	Total national income measured in 1913 dollars (millions)	Amount of income saved measured in 1913 dollars (millions)	Percentage of income saved
1	2	3	4
1909.....	\$30,608	\$ 5,231	17.09
1910.....	32,176	5,509	17.12
1911.....	31,397	4,289	13.66
1912.....	33,985	5,298	15.59
1913.....	35,436	4,880	13.77
1914.....	33,067	4,140	12.52
1915.....	35,150	7,381	21.00
1916.....	41,669	11,401	27.36
1917.....	42,377	7,162	16.90
1918.....	38,830	-1,196	-3.08
1909-18...	\$324,095	\$54,095	15.61

Read table as follows: In 1909 the national income, measured in 1913 dollars was \$30,608,000,000; the amount of income saved was \$5,231,000,000, or 17.09 per cent. This saving is made up of additions to the nation's stock of consumable goods and increases in power to produce. In 1918, owing to the war, the amount consumed was \$1,196,000,000 greater than the amount produced.

¹ King, Willford I. "The Net Volume of Saving in the United States—Part II," *Journal of the American Statistical Association*, December, 1922, p. 467.

The significance of this important saving is

better understood when one fully understands the meaning of the term.

Net savings are additions to the stock of consumption goods or increases in the power to produce or acquire income which have arisen through the acquisition of property or through investments in education.¹

Annual National Savings and School Costs

Over five times as much energy goes into increasing the nation's power to produce as is expended for public education. If all school costs were obliterated and the economic energy thereby released used in an effort to increase the nation's net savings, the increase would be but 18 per cent.

It is evident that school costs are not preventing the nation from increasing its capital, that is, its ability to produce. Not only is this true, but present educational costs constitute a relatively insignificant sum when compared with that which the nation each year finds it possible to make available for increasing its capital.

¹ King, Willford I. "The Net Volume of Saving in the United States—Part I," *Journal of the American Statistical Association*, September, 1922, p. 306.

CHART IV

PER CENT OF NATION'S INCOME SAVED AND PER CENT EXPENDED FOR EDUCATION

Per cent of
Income Saved
(average 1909
to 1918)

15.6

Percentage of
Income Expended
for Education
(1922)

2.8

Research Division
National Education Assn.

Per cent of income saved estimated by Willford I. King. "The Net Volume of Saving in the United States.—Part II," *Journal of the American Statistical Association*, December, 1922, page 467.

Percentage of income expended for education based on data of the National Bureau of Economic Research, and U.S. Bureau of Education.

Are School Costs Preventing Business Expansion?

It is important that industry shall not only be able to meet its current costs and to earn sufficient to pay dividends but in addition be able to increase its capital so that business expansion can continue. Is the burden of school costs such that this is impossible at the present time?

This question is answered by a recent study which estimates the surplus set aside by the corporations of the United States during the years following 1910.¹ The amounts concerned are as follows:

TABLE 4.—CORPORATION SURPLUS, 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

The significance of these figures is increased when one understands the definition of surplus, which follows:

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 which, of course, include school costs has not prevented the nation's corporations from saving a substantial proportion of their net income. The study referred to concludes that the policy of corporations in retaining part of their earnings leads to important national savings, and that whereas the amount of these savings tend to fluctuate from year to year they, on the average, "constitute about one-fourth of the total savings" of the nation "and about 4 per cent

*of the national income."*¹ Another conclusion is 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."

In the light of these facts it cannot be contended that industry is finding it difficult to increase its capital and thereby to provide for substantial business growth. This is clear when one realizes that a sum equal to 4 per cent of our national income is set aside each year for business expansion by the industries of the United States which are organized as corporations.

Are School Costs Making It Difficult for the Individual Citizen to Save Money?

Is the ability of the rank and file of American's citizenry to save decreasing or increasing? Do the large increases in capital and economic power that each succeeding year brings to the United States represent gains on the part of a favored few, or is the average citizen also able to increase his capital?

The figures as to the amount in the savings accounts of the nation's people is one answer to this question. In 1924 the people of the United States had savings deposits of \$20,873,562,000. By "savings deposits" is meant the money in savings 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 1914 one person in every nine in the United States had a savings account. In 1924 one person in every three had a savings account. At the present time there are approximately twenty-five million families in the United States as compared with thirty-nine million individual savings accounts. During the decade 1914 to 1924 deposits in savings accounts per capita increased 109 per cent, or

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

SO MANY records were established in 1924 in the American investment market that only the most sanguine of bankers and bond dealers look for a betterment or even a repetition in 1925, although, by seemingly unanimous accord, the investment bankers and underwriters with headquarters in Wall Street are predicting another big year.—*The Annalist*, January 5, 1925, p. 53.

CHART V

AMOUNTS IN SAVINGS ACCOUNTS OF PEOPLE OF UNITED STATES



Research Division
National Education Assn.

Data from *Savings Deposits and Depositors, 1912-1924*, American Bankers Association Savings Bank Division, New York.

CHART VI

AMOUNTS IN SAVINGS ACCOUNTS PER CAPITA IN THE UNITED STATES



Research Division
National Education Assn.

Data from *Savings Deposits and Depositors, 1912-1924*, American Bankers Association Savings Bank Division, New York.

from \$89 to \$186. If this last amount is reduced to \$115, sufficient to allow for the loss in value of the dollar between 1914 and 1924, the savings accounts per capita made a real increase of twenty-nine per cent.

These figures clearly indicate that the typical American citizen is able to save. There is no evidence here to support the fear that school costs are greater than society can bear.

Do School Costs Make It Difficult to Provide for the Future?

Through life insurance the citizens of a nation may protect their future. Large investments in life insurance by the people of a nation indicate that they are able to produce in excess of their immediate needs. Have school costs become such a burden that the people of the United States find it difficult to provide for the future?

In 1924 there was \$64,000,000,000 worth of life insurance in force in the United States.¹ This sum almost exactly equals our average yearly income. The nation's people have

found it possible to take out insurance to an amount equal to their combined yearly earnings.

The assets of 272 legal reserve life insurance companies at the end of 1924 totaled \$10,499,040,297.² More than three and one-half billion dollars is paid by the American people each year in insurance premiums. This sum represents approximately six per cent of the national income.

Two Important Insurance Premiums

The American people each year pay over three times as much money for insurance premiums as for all public education. This fact does not support the statement that school costs are more than society can bear.

Is there a Shortage of Capital for the Development of New Enterprises?

In an age such as this it is essential that an adequate supply of economic energy should be available for new industries. Capital must be available for the development of new inventions. Is there a shortage of such capital?

¹ Clocker, Walton L., president of John Hancock Mutual Life Insurance Co., *Annual Report of the Proceedings of the Association of Life Insurance Presidents*, 1924, p. 9.

² March, Arthur R. "The Place of Insurance in Our National Economy," *The Analyst*, September 4, 1925, pp. 277-78.

CHART VII

TWO KINDS OF INSURANCE PREMIUMS

Per cent of
national income
paid yearly for
insurance

6.0%

Per cent of
national income
paid yearly for
education

2.8%

Research Division
National Education Association

Data Based on figures in the *Analyst*, Sept 4, 1924, p277 Percentage of income expended for education based on data of the National Bureau of Economic Research and U.S. Bureau of Education.

Millions for Motors

The automobile industry is one that illustrates the large amount of economic energy readily available in the United States for the development of new enterprises. In 1900 the automobile was little more than a dream. In 1924 the American people expended \$4,057,000,000 for automobiles and accessories, not including the cost of motor trucks, according to estimates of the United States Treasury Department.¹

Of the 17,591,000 motor vehicles registered in 1924, 15,460,649 were passenger cars. A total of 2,893,563 people were directly employed in the automobile industry in 1924.² This is more than three times as many people as were required to conduct the nation's public schools.

Nearly twice as much economic energy has gone into the development of this comparatively new industry during the last five years as has been spent for all forms of public education. Here are the figures:

Cost of all Public Education

1920 to 1924, inclusive... \$8,727,680,735

¹ Estimated Expenditures of the People of the United States for Certain Articles, 1920-1924, Section of Statistics, United States Treasury Department, April 23, 1925.

² Facts and Figures of the Automobile Industry, 1925 edition, National Automobile Chamber of Commerce, New York City.

³ Rogers, R. H. The Washington Post, September 6, 1925.

Retail Value of Passenger

Automobiles, 1920 to 1924,
inclusive\$17,077,000,000

Few would deny the importance of the automobile as a factor in the development of our civilization. On the other hand, there probably could have been a considerably smaller number of passenger vehicles purchased during the last five years without threatening any essential feature of our national life.

Millions for Electricity

The Electrical Industry now represents an investment of \$16,000,000,000 and its annual revenue is \$5,000,000,000.³ From almost nothing the production of electricity and the manufacture of electrical equipment has become one of our major industries within the period of a single generation. Here is further evidence of a tremendous store of economic power available for new industries.

Millions for Movies

Fifty million people now go to the movies every week and pay \$500,000,000 annually for this pleasure. This comparatively new indus-

CHART VIII

COST of AUTOMOBILES and EDUCATION 1920-1924 INCLUSIVE

Estimated cost of
passenger automobiles
1920-1924 inclusive

\$17,077,000,000

Estimated cost of all
public education
1920-1924 inclusive

\$8,727,680,735

Research Division
National Education Association

These figures represent approximate estimates based upon figures of the U.S. Treasury Department, U.S. Bureau of Education, and National Industrial Conference Board.

try already represents a capital investment of \$1,500,000,000.¹

Few would wish to deny the American people the opportunity to attend motion picture shows. On the other hand, few would claim that the production of half a billion dollars worth of motion pictures is of first impor-

tance to the economic stability of the United States. The fact that such tremendous sums are readily available for the development of new enterprises is sufficient indication that there is no support for the fear that increasing school costs are threatening the nation's economic stability.

¹ Lowry, Edward G. "The Reform in the Movies," *The World's Work*, July, 1925, p. 330.

TABLE 5.—ESTIMATED EXPENDITURES OF THE PEOPLE OF THE UNITED STATES FOR CERTAIN ARTICLES, 1920-1924

	1920	1921	1922	1923	1924
Automobiles and accessories (exclusive of trucks).....	\$ 3,655,000,000	\$2,924,000,000	\$2,711,000,000	\$3,730,000,000	\$ 4,057,000,000
Cigars, cigarettes, tobacco, snuff, cigar and cigarette holders.....	1,865,000,000	1,742,000,000	1,647,000,000	1,815,000,000	1,847,000,000
Beverages (non-alcoholic), ice cream, sodas, etc. ¹	821,000,000	847,000,000	758,000,000	780,000,000 ²	820,000,000 ²
Theaters, movies, other amusements, dues, etc. ¹	894,000,000	1,047,000,000	872,000,000	842,000,000	934,000,000
Candy.....	810,000,000	715,000,000	603,000,000	660,000,000	689,000,000
Jewelry, watches, etc.....	517,000,000	486,000,000	390,000,000	406,000,000	453,000,000
Firearms and shells.....	93,000,000	74,000,000	67,000,000	87,000,000	67,000,000
Pianos, organs, phonographs, etc.....	545,000,000	463,000,000	340,000,000		440,000,000 ²
Sporting goods, games and toys, cameras, etc.....	366,000,000 ²		335,000,000 ²		431,000,000 ²
Fur articles.....	306,000,000	182,000,000	224,000,000		333,000,000 ²
Perfumes and cosmetics.....	160,000,000 ²		214,000,000 ²		261,000,000 ²
Chewing gum.....	75,000,000	89,000,000	85,000,000		87,000,000 ²
TOTAL.....	\$10,107,000,000		\$8,246,000,000		\$10,419,000,000

¹ Estimated expenditures for ice-cream, sodas, etc., theaters, movies, and other amusements include the amount of tax paid. The tax is added to the regular price and paid by the consumer as an extra charge.

² Estimate based on trend in estimated expenditures for amusements, dues, and candy, since ice cream, sodas, etc., were no longer taxed.

² Estimate based on census of manufactures.

This table prepared by the Section of Statistics, Office of the Secretary Treasury Department, April 23, 1925.

NO ARGUMENT should be required to gain assent to the statement that the system of public education creates a certain valuable product. This product, is, of course, difficult to measure. Obviously, also, it is not so perfect a product as is desired. Doubtless in some cases its cost is unjustifiably high.

Granting all this, however, the fundamental fact of productivity remains. The system of education generates technical skill and increases productive capacity. It tends to raise the intellectual and moral standards of the people, and prepares them to participate intelligently in the government of the country. In recent years it has been effectively used to improve social qualities of great economic importance in such fields as health and thrift. Finally, it makes important contributions in cultivating powers of appreciation which determine the character of economic goods and services demanded and consumed by the community.

It is an equipment of such powers and qualities which constitutes the educational product. The maintenance of this equipment is clearly a first claim upon economic resources. In any comprehensive social balance sheet the equipment possessed by the older generation, which has been produced as the result of past educational effort, must be credited as an asset. This equipment is subject to constant depletion and deterioration through age, disease, and death. Until this, or its equivalent, has been replaced, the community cannot in any true sense be said to have achieved any net income whatsoever. A community may live on its intellectual capital, and emerge at the end of a period intellectually bankrupt.—*Strayer and Haig, Financing of Education in the State of New York, Macmillan Company, New York, 1923, p. 141.*

Is Anything Left Over for the Luxuries of Life?

Are we close to the margin? Would an increase of school costs necessarily mean less provision for things essential to economic stability or is there a considerable supply of energy available for the production of the luxuries and semi-luxuries of life after we have taken care of basic economic needs? The best answer to this question is the amounts spent each year for luxuries and semi-luxuries.

We now spend well over \$10,000,000,000 each year for luxuries. It is probably safe to say that if complete figures were available for all non-essential expenditures they would total at least \$15,000,000,000 each year.

We cannot all agree as to which of the ex-

penditures for the various items that make up our national luxury bill could best be reduced. It is not necessary to make this decision here.

The fact exists that we are not only able to make generous provision for things essential to our economic stability but in addition are able to find billions for the non-essentials of life. The cost of education is but a minor fraction of the expenditures regularly made for luxuries. The present cost of education could be doubled without encroaching upon any of the nation's basic economic needs. Such an increase could be met by making a reduction of less than one-fifth in our luxury expenditures. In the light of such facts, how can it be maintained that school costs are more than society can bear?

CHART IX

A STUDY IN VALUES

Cost of all
Public Education
1922

\$1,799,383,894

Expenditures for
cigars, cigarettes,
and tobacco
1924

\$1,847,000,000

Expenditures for
soft drinks, ice cream,
chewing gum, and candy
1924

\$1,596,000,000

Expenditures for
theaters, movies,
and amusements
1924

\$934,000,000

Research Division
National Education Assn.

Figures based on data of U.S. Bureau of Education and U.S. Treasury Department.

BECAUSE OF this penchant for constantly better living, one cannot figure future possibilities on the basis of the United States of yesterday. Our per capita wealth in the last 25 years has tripled; savings in 1914 were \$8,700,000,000; now they reach \$20,870,000,000. We are truly a billion dollar nation, whose appetite for better living is constantly being whetted by advertising—"the great American urge."
—*The Annalist*, January 5, 1925, p. 38.

Is the Nation Able to Support Its Public Schools on the Present Basis?

The contention that school costs are more than society can bear is unsupported by the facts. The people of the United States enjoy far greater quantities of the material comforts of life than those of any other nation. Their ability to enjoy these comforts is steadily growing. Enormous sums are regularly available for increasing the nation's capital and wealth. The increase in the nation's wealth each year is more than five times the amount expended for all public education. Industry finds it possible to set aside billions for business expansion after it has met all other obligations. Billions are readily available for the development of new commercial enterprises. A rapidly growing percentage of our citizens are finding it possible to establish and maintain substantial savings accounts. The total amount in the

savings accounts of thirty-nine million people in 1924 was more than ten times the total cost of public education. The people of the United States protect their future each year by paying insurance premiums to an amount that is double the total cost of public education. After these essential needs have been provided for billions still remain for non-essentials. The cost of education is but a fraction of the amount expended for goods and services that are clearly in the luxury class. While we spend dollars for the expansion of our industrial processes and for the production of the non-essentials of civilized life we dole out pennies for public school support. To contend that it is impossible for the nation to provide for school support on the present basis, or on a more generous basis if it seems wise, is to disregard the facts and to base one's conclusions on the imaginings of small-visioned pessimists.

AS THE DEMOCRATIC spirit develops and as control over society begins to be vested in the masses on a larger and larger scale, a change is manifested in the nature, composition and totality of the public outgo. Luxurious court expenditures give place to outlays for objects that benefit larger numbers. As the industrial revolution extends its influence and commerce increases, population grows rapidly and becomes more and more concentrated in large urban centers. This circumstance in itself makes for increase in tax burdens beyond the levels that existed theretofore. Paved streets and roads, piped water, extensive sewerage systems, street sprinkling and lighting, snow removal, police and fire protection, traffic regulation, care of the homeless and sick, and general health and sanitation measures become more and more customary adjuncts of an industrialized society. Along with these benefits, attention is given in increasing measure to the mental, cultural and intellectual development of all the members of the nation through compulsory elementary education and through adequate provision for secondary and advanced education. --- Increase in governmental functions and growing populations are not, however, the sole causes for the growth in public expenditures. Better quality as well as larger quantity in public services is demanded. It is not only necessary to provide roads but it is required that they furnish smooth riding by means of concrete or asphalt surfaces. The demand is not only for public school education in any sort of building, improvised or otherwise, but for well-ventilated, well-lighted structures that make an appeal to the artistic sense of the community, and for adequate equipment and a well-trained staff of instructors. As wealth and income of nations rise on the great scale witnessed in the four or five decades preceding the World War, individuals begin to translate into their conceptions of public service the grade and quality of services received in their private capacities.—*Tax Burdens and Public Expenditures, National Industrial Conference Board, 1925.*

Are the Schools Getting Results?

Education a Productive Force

Education is the greatest productive force in modern civilized life. Upon this fact the justification of school costs should rest. The value of a form of human endeavor cannot be considered alone on the basis of its cost. To know that an industry costs two billions a year tells us nothing about its value to the community. This can be known only after we have considered the value of its product. This seems obvious, yet sometimes we find the aspiring politician assuming the opposite. He will say much about "extravagant expenditures for education"; school costs will be condemned as "more than the nation can bear"; all without any consideration of the product which results from school expenditures.

The politician is wrong even when met on his own grounds. Society can afford present school costs. School expenditures are such an insignificant levy against our total supply of economic energy that they are borne with ease, while greater and greater resources are available with each succeeding year for the development of our economic life. But this is not the worst error of such a critic of the cost of education.

The product as well as the cost of an enterprise must be considered in determining its economic value to a community. If the product of education is large a heavy expenditure for the schools is the wisest sort of economy.

When Is an Enterprise Productive?

We have heard much in recent years about productive and unproductive industry. There appears to be much confusion as to what makes an enterprise productive. Some evidently would support this statement:

Human effort organized under private control is productive; when organized under public control it is unproductive.

Others apparently would support this definition:

The business institution through which I make my profits is productive. Any other institution is unproductive, particularly if it is supported by public taxation.

These statements cannot be accepted.

Any institution is productive that either directly or indirectly leads to the satisfaction of human wants. It is not necessary that an enterprise should directly yield private profits in order to be classed as productive.

When a politician pleads for lower taxes so that more money will be available to develop productive industry, he demonstrates either that he has poor command of the English language or else has a poor grasp of economics. What he really wishes to plead for is lower taxes so that greater business profits can be made in private industry. He forgets that productivity of the very highest order may result from human effort organized under public auspices.

If his appeal were for a reduction in the amount of play space furnished children in crowded sections of our cities so that greater sums would be available for the production and skilful advertising of chewing gum, its absurdity would be apparent. Yet appeals just as ridiculous as this are being made.

The sooner it is recognized that no more productive industry can be found in which to invest money than that carried on by our public schools, the richer the nation will be. What is the evidence that supports this statement?

SOME OF THE activities with which public education competes for support are public and some are private in character. By virtue of its position as a public function, education suffers, with other public activities, from a misconception which appears to be widely imbedded in the public mind. Men often write and talk as if all public activity were mere waste, and as if the payment of taxes closely resembled the act of throwing money into the sea. This is indeed a superficial view. A tax in a modern democracy tends to approach a deliberate payment of an equitable amount toward the cost of certain desired objects and services which can be more efficiently supplied by collective rather than by individual action.—*Financing of Education in the State of New York, Macmillan Company, 1923, p. 144.*

The Products of the Schools

Education is our most valuable form of capital. This is readily accepted as a scientific fact by economists. Willford I. King in a study dealing with the growth of the nation's ability to produce lists "increases in the productive power of individual inhabitants resulting from education" as one of four factors that mean greater productive power. He states:

Some of the most expensive and important forms of saving are not tangible but consist of such things as accumulated scientific knowledge and the training of the human mind. Savings of the last-mentioned variety are extremely perishable, since they are constantly being lost through the death of the persons possessing the education.¹

The wealth in trained human minds is far more valuable than that which resides in material property. Suppose that some catastrophe should wipe out many of our valuable forms of physical wealth. Imagine our railroads completely wrecked, factories and dwelling houses razed and crops destroyed. Such a catastrophe would indeed be terrible, but its effect would be but temporary so long as we retained our knowledge and training. In a few generations the losses in physical property could be restored. There would be little more than a halt in our progress.

But imagine some catastrophe that would wipe out our educational wealth. Imagine the American people overnight shorn of the knowledge and training painfully built up through education so that their level of educational attainment was comparable to that of

the inhabitants of darkest Africa. Then the situation would be hopeless. In the presence of all of the tools of civilization we would lapse into primitive life. A return to our present prosperity would be possible only after centuries of education had once again restored that prime essential of civilization—a high level of educational attainment.

School costs are a depreciation fund whereby civilization protects its most important form of capital from deterioration. In the degree that our educational capital is protected and added to we may expect to prosper. School costs represent a levy against our wealth to be sure, but this is the least important consideration. School costs also represent increased power to produce—an investment from which dividends of the highest order result.

Good Education and Good Business

The business man sometimes overlooks the work the school does in creating good buyers. Educated customers make for good business. The educated man is a good earner, and earning power is prerequisite to purchasing power. The educated man is an appreciative buyer.

What market would many industries have for their product if the tastes of the American people were similar to those of the uncivilized savage? The man who has little appreciation for good wearing apparel, a comfortable home, good literature and music is likely to be a poor customer.

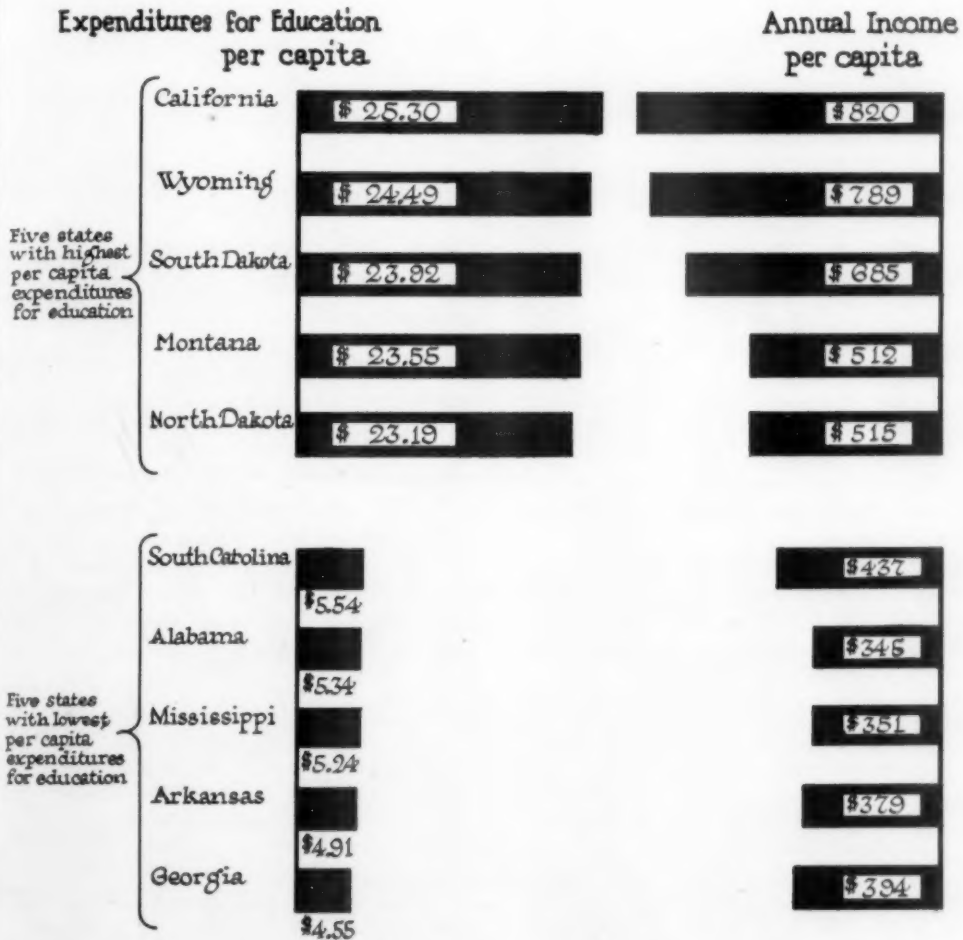
It is in building up better appreciation of the products of modern industry that the school makes a substantial contribution to business prosperity.

¹ Willford I. King, "The Net Volume of Saving in the United States," *American Statistical Association Journal*, 1922, p. 307.

IN EDUCATIONAL activities lies perhaps the highest hope of the race both for increasing its productivity and for rationalizing its consumption. Nothing is more wasteful than ignorance. On the side of production intelligence in labor and management makes for large output at low cost, and on the side of consumption intelligence makes for socially effective use of that product. A given educational expenditure is of great economic significance, if it so transforms the scale of values of a rich young man that he secures greater satisfaction from some form of professional activity than from a life devoted to the pursuit of undisciplined desires, or so transforms the scale of values of a factory worker that he prefers to devote his leisure to intellectual pursuits, rather than to long evenings of mental inertia.—*Strayer and Haig, Financing of Education in the State of New York, Macmillan Company, 1923, p. 143.*

CHART X

SCHOOL SUPPORT AND ECONOMIC PRODUCTIVITY



Research Division
National Education Assn.

Data from *Statistics of State School Systems 1921-22*, U.S. Bureau of Education and *Distribution of Income by States in 1919*, National Bureau of Economic Research.

The University of Wisconsin recently completed an investigation, the results of which support this statement.¹ A direct relation was found between the amount of education possessed by farmers and the desire and ability to command certain of the creature comforts of life. Table 6 gives the summary of the findings.

Does a high level of education mean anything to manufacturers of plumbing supplies and heating systems?

Education and Advertising

Some would contend that demand can be created through advertising. But how futile would be our yearly expenditure of \$1,284,000,000 for advertising if the school had not prepared the ground in which the seed is planted.

Ability to read with ease is essential to modern advertising methods. In the five states that spend least for education the percentage of illiteracy among the native-born white population is approximately fifteen times as high as in the states that spend the most for their schools. These figures agree with those on magazine circulation.

In the five states with the lowest percentage of illiteracy the combined circulation of ten nationally known magazines is three times as high in proportion to population as in the five states with the highest percentage of illiteracy.

Education and Earning Power

Repeated studies have shown that earning power increases with education. So far as it has been possible to discover no investigation

has ever indicated that earning power does not increase with the amount of schooling possessed. Some of the findings of studies that have been made on this subject are given below.

Nine Dollars a Day for Attending School²

Uneducated laborers earn on the average \$500 per year for forty years, a total of \$20,000
High school graduates earn on the average of \$1,000 per year for forty years, a total of\$40,000
This education required 12 years of school of 180 days each, a total of 2,160 days in school.
If 2,160 days at school add \$20,000 to the income for life, then each day at school adds \$9.02.
The child that stays out of school to earn less than \$9.02 a day is losing money, not making money.

One investigation arrived at the following conclusions:

If the "Value" of an individual is considered to be the amount which at five per cent interest would yield an income equal to the salary received.³

A day laborer is "worth"\$18,000
A shop apprentice is "worth" 25,000
A trade school graduate is "worth" .. 42,000
A technical school graduate is "worth" 60,000

Education and the Earning of Farmers

It has been assumed that farming is the occupation in which education counts least. In fact, some have accused the school of educating away from the farm. Investigations conducted in such farm states as Georgia, Indiana, Illinois, Iowa, Wisconsin, Ohio, New

¹ "Earning Power and Education," *World's Work*, July, 1923, pp. 245-6.

² *Virginia Schools, Their Progress and Their Needs*, Richmond, Virginia.

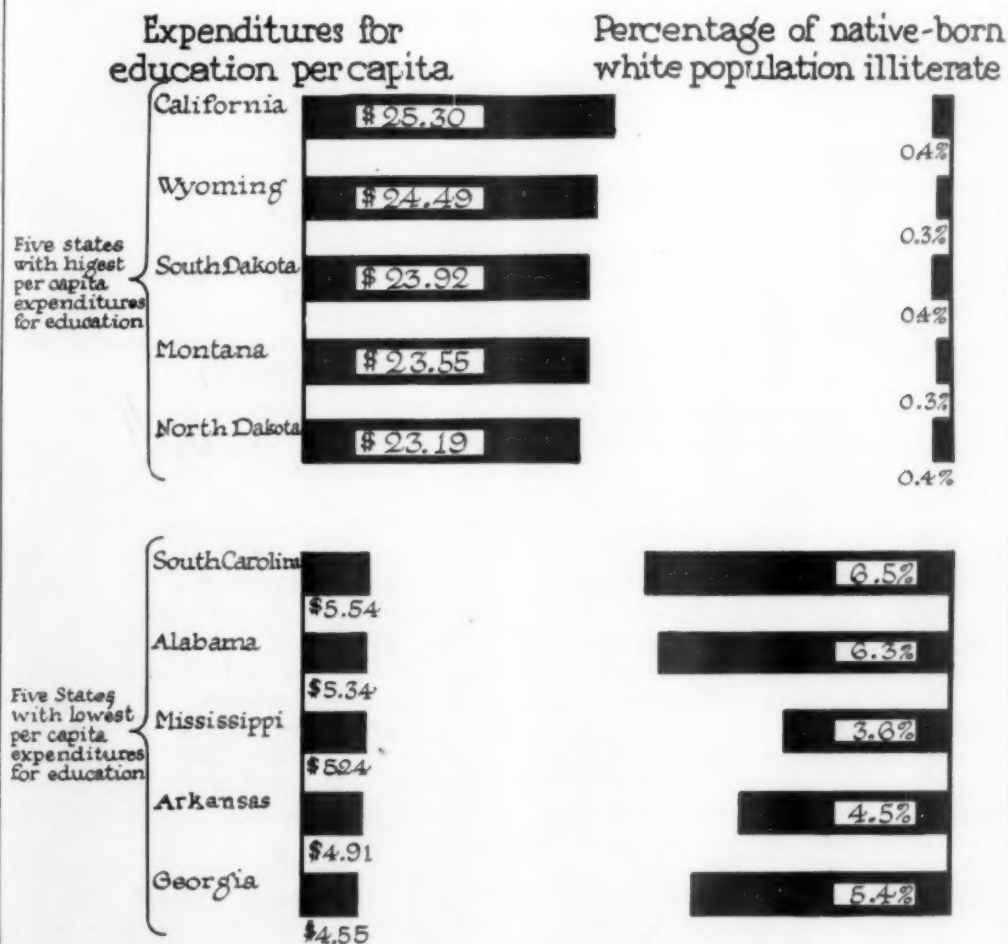
³ "A Little More Light for Mr. Edison," *The Epworth Herald*.

TABLE 6.—PURCHASING POWER AND EDUCATION

Education of farmers	Per cent with bathrooms	Per cent with modern lighting systems	Per cent with furnace	Per cent with autos
Common School	22	17	22	20
Short Course in Agriculture	24	22	30	24
High School	27	21	30	25
College	49	44	47	29

CHART XI

SCHOOL SUPPORT AND SCHOOL RESULTS



Research Division
National Education Assn.

Data from *Statistics of State School Systems, 1921-22*. U.S. Bureau of Education, and U.S. Bureau of Census.

York, Washington, and Maryland, indicate that this assumption is unjustified by the facts.¹ The facts for Kansas given below are similar to those found in every state investigated:

Education of Farmers	Annual Earnings
Common School	\$422.00
High School	554.00
College Partial Course	859.00
Completed College	1,452.00

A recent United States Civil Service Report gives the results of an examination of seven thousand contestants for general clerical positions with the government. The examination given to test general clerical ability, resulted as follows:²

Schooling	Percentage of each class passed
Eighth grade	7
Ninth grade	10
Tenth grade	16
Eleventh grade	14
Twelfth grade	32
1st year of college	44
More than one year of college	48

The greater earning power of those with superior education is the result of two factors, education and natural ability. Those with greater ability tend to remain in school longer. A man of genius may do well with little school training. On the other hand, it is probable that among the average run of men general education plays a greater roll in increasing earning power than might be imagined. This surmise is supported by the figures concerning the earning power of whole states.

Those states in which education is poorly supported earn much less per person than the states in which educational support is more generous. Does this mean that the native ability of the people of whole states is conspicuously lower than that of other states? Or is it largely the result of low level of educational attainment by the masses of the people?

Mental flexibility is a characteristic of the educated man. Willingness to try new methods and to seek more effective economic processes are characteristics that accompany a

high level of educational achievement. The difficulty of introducing modern methods of agricultural production among the illiterate peasants of Russia has frequently been commented upon.

It is reasonable to assume that one of the important factors determining the level of economic productivity of a state is the level of educational attainment of its citizenry. Lack of natural resources is an unsatisfactory explanation. There are states with natural resources above the average that are below the average in productivity per capita. Low educational status is one of the causes.

Education and Thrift

Not only do the states with the better supported school systems produce more, they also save more. This might be expected. But not only do they save larger sums, they also save a larger percentage of their total income. The fear held by some that education results in extravagant tastes is not supported by these facts.

Education and the Production of Men of Eminence

A thorough education is increasingly necessary for those who rise to the top. In 1917 less than 73 per cent of those listed in *Who's Who* had college training. In 1923, 77 per cent had had college training. Eleven per cent of those listed in this publication in 1917 had had no formal schooling. By 1923 this percentage had dropped to eight.

The road to fortune is becoming increasingly difficult for the self-educated man. The occasional Lincoln may rise in spite of the lack of a formal school training. On the other hand we do not know how many men of potential genius fail to make important contributions to the world's progress due to lack of school training.

Approximately seven per cent of our population has some college training. This seven per cent of our population furnishes over 77 per cent of those who have achieved sufficient distinction to be listed in *Who's Who*. An-

¹ "Earning Power and Education," *World's Work*, July, 1923, pp. 245-6.

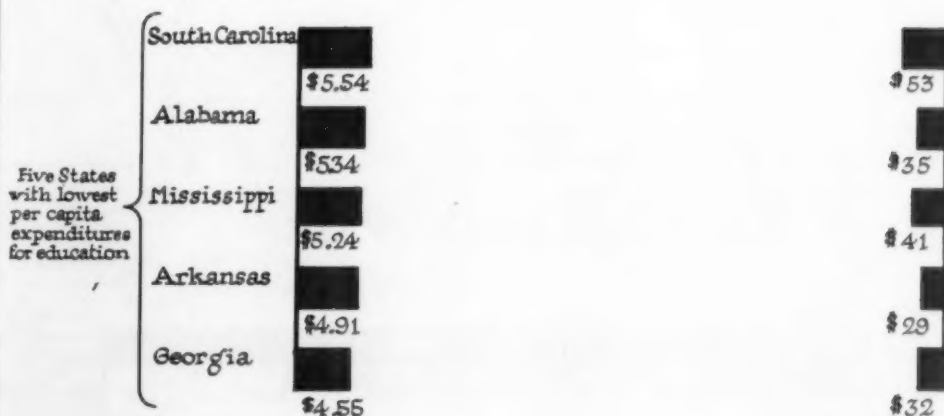
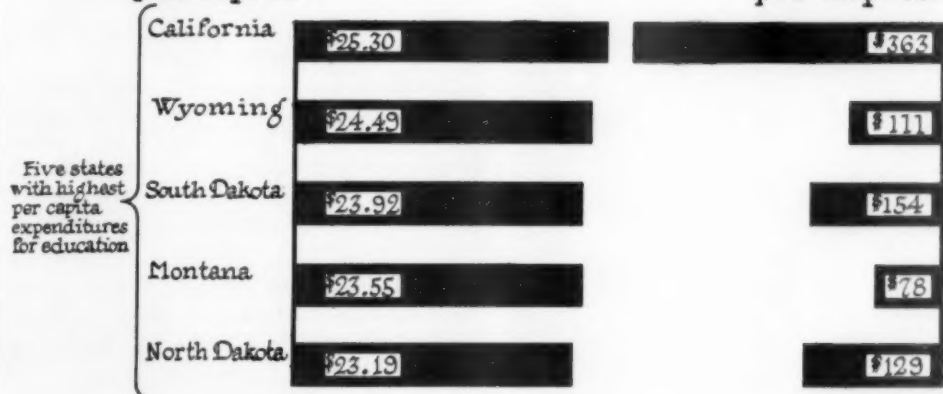
² "Does Education Help," *The Teachers Bulletin*, Highland Park, Michigan, October 1, 1923, p. 2.

CHART XII

SCHOOL SUPPORT and SAVINGS ACCOUNTS PER CAPITA

Expenditures for education
per capita

Savings Accounts
per capita



Research Division
National Education Assn.

Data from *Statistics of State School Systems, 1921-22* U.S. Bureau of Education, Bulletin, 1924, No. 31, p. 34, Table 26, and *Savings Deposits and Depositors, 1912-1924* American Bankers Association, Savings Bank Division, New York.

other seven per cent of our population has practically no school training. This seven per cent of our population produces but three-tenths of one per cent of those listed in *Who's Who*.

It is sometimes said that in spite of poor schools, more great leaders come from the country than from the cities with their better schools. This is a popular fallacy. It is not supported by the facts.

Poor Schools Do Not Produce Leaders

In proportion to population, over six times as many of the nation's leaders are born in urban as in rural communities. This statement is based upon evidence in *Who's Who*.¹ The census of 1870 is nearest the birth of most of the people now included in this publication. At the time of this census, 26,952,301 people were living on farms in the United States and 11,606,070 were living in cities, towns, and villages.

Since nearly 70 per cent of our people were living on farms in 1870, and since most of the people now listed in *Who's Who* were born around 1870, we would expect to find that most of those now listed in *Who's Who* were

born on farms. Just the opposite is the case.

DISTRIBUTION OF POPULATION, 1870

	Population in 1870	Percentage
Living on farms.....	26,952,301	69.9
Living in cities, towns, and villages.....	11,606,070	30.1
Total.....	38,558,371	100.0

Figures based on per cents given in *Who's Who in America*, Vol. 13, page 29, and population figures of Federal Census.

BIRTHPLACE OF "NOTABLES" BORN ABOUT 1870

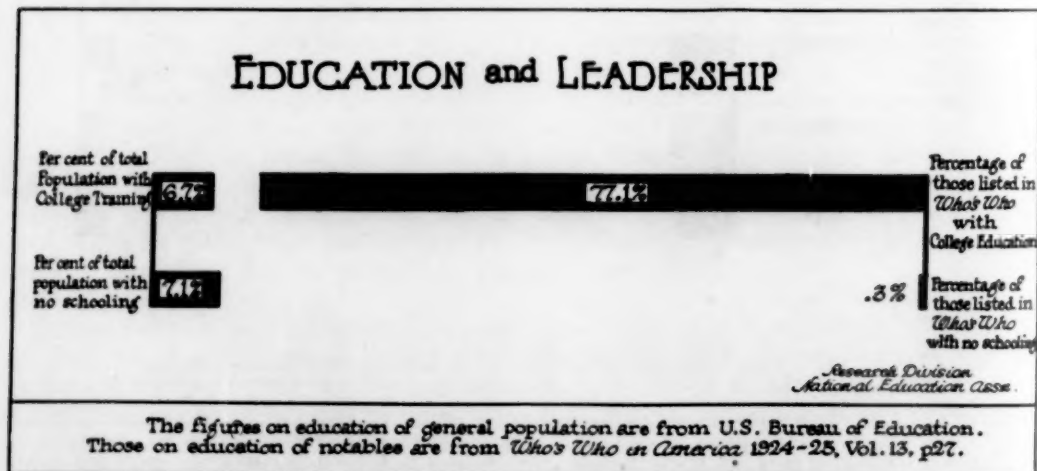
	No. of "Notables" in <i>Who's Who</i>	Percentage
Born on farms.....	6,288	25.9
Born in cities, towns, and villages.....	17,990	74.1

Data from *Who's Who in America*, Vol. 13, page 29.

Although 70 per cent of our people were living on farms in 1870, but 6,288, or 25.9

¹ *Who's Who in America*, Volume 13.

CHART XIII



per cent, of the people listed in *Who's Who* in 1923 were born on farms. Although only 30 per cent of our population in 1870 was living in cities, towns, and villages, this 30 per cent has produced 17,990 notables or 74.1 per cent of those listed in *Who's Who* in 1923.

Stated differently we may say:

Each 1,000,000 people born in rural sections produced 233 notable men and women.

Each 1,000,000 people born in urban sections produced 1,550 notable men and women.

The farm falls short of contributing its proportionate share of the Nation's leaders. It is in the towns and cities and villages that our leaders are born and educated. The handicap of the miserable educational facilities provided in many rural sections is too great for country children to overcome. Genius may "out," but few of us are geniuses. Most of us need a good education to bring out the best that is in us.

A nation cannot spend too much for education. No industry can ever be more productive than an effective public school system. The material goods with which modern industry

mainly concerns itself is a fixed quantity. No nation can increase its material resources. "Matter cannot be created nor destroyed."

The intelligence and skill with which a nation uses its basic material resources is not a fixed quantity. They are limited only by the limits that are placed upon the development of a sound system of education.

In the final analysis school costs are not a burden but an investment which pays handsome dividends. Those who would reduce school costs so that the money thereby "saved" may go into productive industry would kill the goose that lays the golden eggs. Already we are spending each year billions in forms of industry that mean little in permanent economic, intellectual, or spiritual progress.

The real need is for a reduction in the billions now being put into non-essential forms of industry. The money thus saved can then be diverted into truly productive forms of industry such as the public schools. Here is the solution, and the only real solution, of the problems following in the wake of advancing civilization.

CHART XIV

Are the Nation's Leaders Born on Farms or in the Cities (Another Popular Fallacy Exploded)

Out of every 1,000,000
farm born children
this many achieve
eminence

233

Out of every 1,000,000
city born children
this many achieve
eminence.

1550

Research Division
National Education Assoc.

Based on Data in *Who's Who In America*, Vol. 13, p29, and
population figures of Federal Census.

Selected References for American Education Week

Where American Education Week has yielded the greatest returns to school progress it has been the focusing point of a continuous year-round program of publicity rather than a sporadic effort extending over a period of a week. Progressive school people are coming to recognize that intelligently organized school publicity is an essential feature of every well organized school system. In the following references it has been the aim to select those that would be of greatest help to school people, not only in preparing material for education week itself but in organizing continuing programs of publicity.

CHILD, RICHARD WASHBURN. "The Great American Scandal," *The Saturday Evening Post*, August 29, 1925.

The attempt to throw upon the schools, public or private, the major work of character building is a futile attempt to pass responsibility for a personal service owed by parents on to institutions and substitutes which can never supplant good parenthood. A boy with a good father needs no Big Brother.

It is principally the good home and the parent willing to put his effort and time into the future of the children which are the bulwark against all the influences which are named as elements making for youthful lawlessness.

There has been too much currency given by parents to the vague notion that they can pass their responsibility on to church, school, and to the modern idea of some mysterious power in world organization.

EDUCATIONAL REVIEW. "What Our Laymen Think About Education," Vol. 70, No. 2. September, 1925.

Constructive editorial statements, relative to public education culled from leading newspapers.

Abstracts of similar statements have been included in previous issues of the *Review*. However, clipping bureaus, maintaining a large force of searchers scanning hundreds of newspapers every day, find that often there is a complete dearth of editorials which touch upon public education.

According to the editor of the *Educational Review*: "The comments that are made fall mostly into two classes: First are the criticisms of school usages which do not exist. The assailant sets up his memory of fool school practices of long

ago and valiantly attacks them as typical of the present. The other sort of preachments are laudations of the schools of 1870 and wishing we had them now because they taught the children how to write and spell and cipher. Both of these styles of comment could be knocked to pieces before any board of judges of a debating society if the editor could be induced to stand up in person. 'Where is the school which does that?' is sufficient to upset the first type. For the second, you have the Springfield tests, and other comparisons showing the demonstrable superiority of present-day school children over their predecessors trying the same examinations." Among the topics of really constructive newspaper editorials reviewed in the September 1925 issue of the *Educational Review* are: "The National Education Association," "President Coolidge's views on education," "Apportioning school funds," "Education pays," and "Children as the Nation's teachers."

EVVARD, MARTHA COOPER. "Personality Finds Place in Curriculum," *American Educational Digest*, Vol. 45, No. 1. September, 1925.

Character training is one of the chief objectives of present day education. The teachers at Ames, Iowa have selected these nineteen desirable personal characteristics for teachers in training and have worked out a detailed procedure for developing each characteristic: Social qualities, tact, co-operation, leadership, tolerance, poise, adaptability, self-control, personal appearance, optimism, interest in teaching, enthusiasm, judgment, friendliness, courtesy and consideration, refinement, spirit of service, firmness, sympathy.

FISHER, H. A. L. "Should America Lead the World?" *Colliers*, April 11, 1925.

Mr. Fisher, England's War Minister of Education, says of the public school system of America: Speaking quite broadly, it is a huge success. Without it America would not be a nation, but would reproduce all the discords and painful historical contrasts which are the legacy of time to the continent of Europe.

In education everything depends on the teacher. If the teacher is good, education is good, if the teacher is indifferent, education is indifferent. The recruitment of the teaching profession is therefore a matter of the first civic importance. * * *

The teaching profession seems to stand on a lower plane of public esteem in America than it does in Britain. It has less prestige; it attracts a smaller proportion of the ability of the country; it is proportionately with average earnings less well remunerated.

GOWANS, J. W. "How We Observed Education Week In Hutchinson, Kansas." *Official Report*. Department of Superintendence, National Education Association, p. 166 and following.

The following are excerpts from this article:

There is a rightful inquiry on the part of the public in all communities as to the reasons for large expenditure of public funds for the school program. Since educational demands are so much greater than formerly, the question is frequently asked what is the purpose of teaching a certain subject or group of subjects? What are the schools trying to do? Do they really have any certain aims or objectives?

Education week furnished an unusual opportunity to place strategically before the public the purposes of education so splendidly stated in the Cardinal Objectives of Education. Weeks in advance we began to prepare. Principals' meetings, group, and general teachers' meetings were held so that all teachers had the specific details of procedure in mind. The purpose was not to put on a separate program each day, but to develop in the regular daily class work the particular objective to be stressed showing, if possible, how the objective for the day functioned in the regular school work. The individual teacher sent to her principal the detailed plan for her lessons for each day. This was additional labor, but was thought-provoking since all wished to excel. Building plans were then sent to the central office. Unusual lessons were called specifically to the attention of the general public.

Our grade supervisor spent considerable time in analyzing the books used either as regular or as supplementary texts and it was highly illuminating to note the difference in the adaptability of the various texts, some seem to have been built with the cardinal objectives in view; in others they were in decided eclipse. From this analysis much information was gleaned concerning first-hand material in the school texts relating to each subject taught. Bulletins were sent to all the teachers with direct information and suggestions as to plans. However, each teacher was urged to use her own initiative and make her plan as outstanding as possible.

The schedule for the week was as follows:

Monday's objective.....	Citizenship
Tuesday's objective.....	Vocational efficiency
	Worthy Home Membership
Wednesday's objective....	Fundamental Processes
Thursday's objective.....	Ethical training
	Right Use of Leisure
Friday's objective.....	Health

Generous publicity was given by the newspapers. Reporters visited the schools and gave first-hand experiences. Boxed editorials found a place on the front page. The program for the week, the seven objectives, and the objective or objectives for the day were first-page news. Practically every one of the homes in the city was reached. For more than a week the reading public had called to their attention each day the fact that there are specific and definite aims in the program for the public schools.

The American Legion was much interested and obligated themselves to see that the motion picture theaters gave the proper publicity. For a week at each program in all the moving picture theaters the audience read on the screen the cardinal objectives of education and that a visit to the Hutchinson schools would furnish evidence of the fact that they were being stressed.

The Chamber of Commerce gave a noon luncheon to its membership in a new grade building. At one o'clock the children assembled in their rooms and the representatives of the Chamber visited the rooms observing the work done. On every hand they saw concrete evidences of the objectives of education. Posters, signs, recitations all told the story of the plans and aims of the public school.

Only a few examples can be given to illustrate classroom procedure. A lesson in worthy home membership was planned by a fifth-grade class in mathematics. The theme of the lesson was Children's Allowances. It was a discussion lesson with simple problems to illustrate the points. The thought was stressed that to be a worthy home member each person must be mindful of the rights of others. They discussed and determined what an allowance for the average fifth-grade pupil should cover. The suggestion was emphasized that perhaps a part could be saved each week. The aid of parents was enlisted. The teacher has followed up the lesson in the home.

The classes in salesmanship in senior high school had an unusual chance to demonstrate the vocational objective. The largest department store invited the salesmanship classes to take charge of the establishment for the day. Students worked with the regular clerks as salesmen; others worked in the credit and accounting departments. One group assisted the window dressers, another wrote all the advertisements for the day, incidentally working in the vocational objective in a clever way.

In addition to the regular assignment in the composition classes in senior high school each student was assigned a particular objective as his project for the week. He was asked to assemble all material from any recitation or any school activity which had a direct bearing on his objective. He gave an oral report to the class on the day his assignment was discussed.

On Friday one of the junior high schools summarized the work of the week in a pageant given in assembly. The parents and friends attended in large numbers. The objectives were interpreted by posters, signs, and pantomime, no words being spoken. Ethical training and citizenship were portrayed in two plays written by some of the children. They clearly delineated good citizenship and right living by contrast with poor citizenship and wrong living; children's productions, but none the less effective. One group of girls from the home economics department demonstrated the making of a kitchen costume and another the preparing of the ingredients for the making of cookies. Mathematical exercises, work in English, and the funeral of poor writing attended with elaborate ceremonies called attention to fundamental processes. The physical training classes proved that health is being conserved.

Some five thousand people visited the schools, seeing the actual application of the aims and purposes of education and also becoming better acquainted with classroom procedure.

KOOS, LEONARD V. "A Comparison of Aims from Elementary School to University," *Educational Review*, Vol. 69, No. 4. April, 1925.

Professor Koos, University of Minnesota, presents a significant study of what a hundred and twelve writers upon education say the present aims of schooling are. The present generation of teachers have seen a swing from Münsterberg's insistence that aims do not matter to Payson Smith's declaration that you'll never arrive unless you know whither you are going. This article undertakes to list the destinations mentioned by the best known guides.

A total of 112 recent books and articles are represented in the study, 22 pertaining to the elementary school, 25 to the secondary school, 40 to the college of liberal arts, and 25 to the university.

A review of this literature shows that these are the seventeen aims and functions common to elementary school, secondary school and college: General or liberal training,* training for the needs of life, social-civic responsibility,* morality (and character), domestic responsibility, religious training, training for leadership,* health, recreational and esthetic participation, practical and occupational efficiency,* intellectual training,* mental discipline,* democratic education, recognition of individual differences, exploration and guidance,* preparatory education, and training in the fundamental processes. The asterisk indicates that these aims and functions are also common to the university. It should be noted that while the elementary and secondary schools, colleges and universities have many aims and functions in common, the references reviewed showed that the percentages of recognition given varied widely in these different educational units. The literature reviewed showed that these four aims or functions are peculiar to universities: Research, instruction, extension, and publication.

LINCOLN, NEBRASKA, BOARD OF EDUCATION. *Reports of the Superintendent of Schools*, Nos. 1-6.

A series of pamphlets illustrative of the excellent publicity work now being carried on in a number of school systems. Titles of some of these reports follow: What Kind of Teachers Do Your Children Have? Are The Schools Producing Desired Results? What the Schools Cost? Excellent graphic and pictorial illustrations accompany the discussion of these topics.

MARYLAND STATE DEPARTMENT OF EDUCATION. "School Publicity a Professional Opportunity and Obligation." *Maryland School Bulletin*, Vol. 5, No. 3, November, 1923.

This is one of the most suggestive publications concerning school publicity that has yet been prepared. Although written primarily with the needs of Maryland in mind, it will be suggestive in the development of a publicity program in any state or local school system. Suggests methods of dealing with such school criticisms as these: The "three R's" are being neglected for fads, frills and folderols; A high school education trains children away from the farm and neighborhood; Children cannot spell as well as they could in the "old days"; Compulsory school attendance is undemocratic, and an interference with personal rights; The schools are not thorough in their teaching; they attempt to teach too many things. The foregoing appear under the heading "Common Sense Answers for Common Sense Critics," one of the ten sections into which the Bulletin is divided.

MILLER, CLYDE R. AND CHARLES, FRED. *Publicity and the Public School*. Houghton, Mifflin Co. 1924, 179 p.

HINES, HARLAN CAMERON AND JONES, ROBINSON G. *Public School Publicity*. Macmillan Co. 1923, 72 p.

The two references above will be found valuable to school officials anxious to develop effective programs of school publicity. They are based upon an extensive and successful experience in this field.

NATIONAL EDUCATION ASSOCIATION, 1201 Sixteenth Street, Washington, D. C. *Research Bulletin*, "Five Questions for American Education Week," Vol. 1, No. 4.

Raises these five practical questions and marshals facts to answer them: (1) What are the weak spots in our public school system; (2) What National defects result from the weak spots in our public school system; (3) How may our public school system be strengthened; (4) Can the Nation afford an adequate school system; and (5) Do good schools pay?

—, *Research Bulletin*, "Facts on the Public School for American Education Week," Vol. 2, No. 4.

Answers these four pertinent questions: (1) What's right with the public schools?; (2) How to strengthen the public schools?; (3) Can we afford it?; and (4) How shall we observe American Education Week?

Both of the above Bulletins are out of print. However, they can probably be obtained from your school or public library.

JOURNAL OF THE NATIONAL EDUCATION ASSOCIATION. "How to Strengthen the Schools," Vol. 14, No. 1, January, 1925.

What must be done to strengthen the American public school system?

Money must be provided for better teachers.

The teaching profession must be made a desirable career for a life work.

The public school must have a modern curriculum.

There must be equalization of education opportunity. Equality of opportunity can be obtained by removing a large share of the burden of school support from the small district, and placing it upon larger taxation units, such as the county, the state, and the nation.

—, "Making a Publicity Campaign," by P. R. Spencer. Vol. 14, No. 2, February, 1925.

Suggests a technique by which school workers can plan the most intelligent and productive publicity program for their communities.

—, "Abstracts of Addresses Given Before the General Sessions at Cincinnati." Vol. 14, No. 4, April, 1925.

Contains the salient points of seventeen addresses given at the last meeting of the Department of Superintendence. Presents the frontier thinking of the present on what the schools are trying to do and how they can do it better.

SUZZALLO, HENRY. *Our Faith in Education*, Philadelphia, J. B. Lippincott Co., 1924, 108 p.

Shall we abandon our schools to the politicians and the free lance critics, or shall we use our great educational system for the maintenance of a successful democracy? This and similar questions are answered in such a way as to increase America's faith in education.

U. S. BUREAU OF EDUCATION. Department of Interior, Washington, D. C. (1) *Suggestions*; price, 5 cents, in lots of 100 or more, 2 cents each. (2) *Broadside*, with material suitable for newspaper articles, addresses, etc. Price, 5

cents; in lots of 100 or more, 1 cent each. (3) *The Quest of Youth*, a historical pageant. Price 10 cents; in lots of 100 or more, 6 cents each. (4) *School and Teacher Day*, an illustrated folder. Price, 5 cents; in quantity, 75 cents per hundred. (5) *How, Why and When to Prepare for American Education Week*. 22 pages, Price, 5 cents; reduction for quantity orders. (6) *School Life*, October, 1925. Special issue for American Education Week. Price, 5 cents.

This material has been prepared especially for the observance of American Education Week and contains many timely suggestions. Copies may be procured from the Superintendent of Documents, Government Printing Office, Washington, D. C.

WAPLES, DOROTHY. "A New War With Old Weapons," *Educational Review*. Vol. 70, No. 2, September, 1925, p. 57-61.

Clever discussion of the question: Can aristocratic higher education exist alongside democratic elementary schooling?

Argument by argument, we are employing the same defenses now against promiscuous college training which were in action two hundred years ago against promiscuous grammar school training. The target is new, but the artillery is of familiar 1700 design.

WELLS, H. G. "Teachers as Statesmen." *The Living Age*, January 24, 1925.

The schoolmaster's place is not only important but supremely important.

The teacher has to be the very soul and center of a reconstructed human life—nothing less than that. Only by and through the teachers—the heroic teachers of the world, not all the teachers—will it be possible to conceive of any escape from the distressful, unsatisfactory life that mankind lives today.

Education Week Proclamation

CALVIN COOLIDGE

President of the United States

EDUCATION is becoming well-nigh universal in America. The rapidity of its expansion within the past half century has no precedent. Our system of public instruction, administered by State and local officers, is peculiarly suited to our habits of life and to our plan of government, and it has brought forth abundant fruit.

In some favored localities only one, two, or three persons in a thousand between the ages of 16 and 20 are classed as illiterate. High schools and academies easily accessible are offering to the youth of America a greater measure of education than that which the founders of the Nation received from Harvard, William and Mary, Yale and Princeton; and so widely diffused has advanced study become that the bachelor's degree is no longer a symbol of unusual learning.

All this is reason for gratification; but in the contemplation of worthy achievement we must still be mindful that full provision has not yet been made throughout the country for education of either elementary, secondary, or higher grade. Large numbers have not been reached by the blessings of education. The efficiency of the schools in rural communities is, in general, relatively low; too often their equipment is meagre, their teachers poorly prepared, and their terms short. High schools, notwithstanding their extraordinary growth, have not kept pace with the demand for instruction; even in great cities many students are restricted to half-time attendance, and in outlying districts such schools are frequently insufficient in number or inadequate in quality. In higher education the possibilities of existing institutions have been reached and it is essential that their facilities be extended or that junior colleges in considerable numbers be established.

These deficiencies leave no room for complacency. The utmost endeavor must be exerted to provide for every child in the land the full measure of education which his need and his capacity demand; and none must be permitted to live in ignorance. Marked benefit has come in recent years from nation-wide campaigns for strengthening public sentiment for universal education, for upholding the hands of constituted school authorities, and for promoting meritorious legislation in behalf of the schools. Such revivals are wholesome and should continue.

Now, therefore, I, Calvin Coolidge, President of the United States, do proclaim the week beginning November sixteenth, 1925, as American Education Week, and I urge that it be observed throughout the United States. I recommend that the Governors of the several States issue proclamations setting forth the necessity of education to a free people and requesting that American Education Week be appropriately celebrated in their respective States. I urge further that local officers, civic, social, and religious organizations, and citizens of every occupation contribute with all their strength to the advance of education, and that they make of American Education Week a special season of mutual encouragement in promoting that enlightenment upon which the welfare of the Nation depends.