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BIENNIAL SURVEY OF EDUCATION
IN THE UNITED STATES
1928-1930

CHAPTER I
SCHOOL ADMINISTRATION AND FINANCE

EDUCATION

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CHAPTER I

SCHOOL ADMINISTRATION AND FINANCE

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I. SCHOOL ADMINISTRATION

By W. S. DEFFENBAUGH

Chief, Division of American School Systems, Office of Education

INTRODUCTION

This is the first time within recent years that a chapter on school administration and school finance has appeared in a biennial report of the Office of Education. In 1914, there was published a chapter on Progress in Educational Administration and in 1923 a chapter on School Finance. Both the subjects of administration and finance have, however, been treated in numerous bulletins of the office and in various chapters on legislation and on city and rural schools that have appeared in the commissioner's biennial reports.

Since no recent chapter devoted wholly to administration and finance has been prepared to show trends, this chapter instead of confining itself to happenings during the biennium, 1928-1930, attempts to show briefly for a number of years the trends in State and local school administration and in school finance.

There being so many topics under the head of administration, and the amount of space allotted for this chapter being limited, only a few topics are included. Since certain phases of the organization and administration of elementary, secondary, and other types of school are treated in other chapters, that part of this chapter treating of administration is confined largely to State boards of education and to local units of school administration.

STATE SCHOOL ADMINISTRATION

Public education in America is a State and not a national function. Neither is it a function of any political division of the State. Although education is a State function, the State may use any of its

political subdivisions—as cities, counties, and townships—as units for administering the schools, or it may create school districts irrespective of such political units. Even if education is a State function, the various types of school districts created by the State are usually allowed great freedom in the management of their schools, especially in the matter of working out details. State control does not necessarily mean that the State has immediate direction and supervision of the schools within any of the school districts. The States delegate much of their authority to city, county, or other administrative units.

At first none of the States exercised much control over the schools, communities being permitted to organize schools and to administer them largely as they pleased. They set up their own qualifications for teachers, determined the length of school term, subjects to be taught, etc. In practice there were about as many school systems in a State as there were school districts.

In the beginning, State departments of education consisted of the State superintendent and possibly a clerk. The State boards of education in the few States having such boards had few powers and duties. The work of the early State departments of education was mostly clerical in character. To-day they are called upon to discharge many highly professional functions, such as the certification of teachers, the selection of textbooks, the preparation of courses of study, the administration of teacher-training schools, the approval of school building plans, etc. Since the enactment of the Smith-Hughes vocational education law, 32 of the State boards of education have been designated as the State vocational education boards.

In order to show trends with respect to the general administrative organization set-up of State-school systems, data are presented regarding State boards of education and the chief State school officer and his staff.

STATE BOARDS OF EDUCATION

Number of State boards.—In the early days of the American public-school system there were few State boards of education, and these few were largely promotional agencies. To some of them was assigned the care of school funds; but upon the whole the early State boards of education were of the advisory and not of the legislative type.

In 1900, 31 States had State boards of education with functions relating to the common schools. In 1910, there were only 32 States that had such boards, but from 1910 to 1920 the number increased to 42. In 1930, there was the same number of States having State boards as in 1920. Within the past decade one State (Wisconsin)

abolished its State board of education, and one State (Iowa) established such board. The six States that do not have general State boards of education are Maine, Nebraska, Ohio, Illinois, Wisconsin, and South Dakota.

Composition of State boards of education.—The composition of State boards of education having functions relative to the general school systems in the several States is shown in the following table:

TABLE 1.—*Composition of State boards of education and method of selection (1930)*

States	Ex officio members							Appointed or elected members				Term in years	Total ex officio members	Total appointed or elected members	Total number on board
	Governor	Other State political officers	State superintendent of public instruction	President of State university	President of agricultural and mechanical college	President of State normal school	Other education officers	In educational work	Not in educational work	May or may not be in educational work	Appointed or elected by—				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Alabama	1		1							10	Governor	6	2	10	12
Arizona	1			1				3			do	5	5	3	8
Arkansas			1			2					do	7	1	7	8
California			1						10		do	4	0	10	10
Colorado		2	1								do	3	0	3	3
Connecticut	1	1									Governor	6	2	9	11
Delaware										9	do	5	0	5	5
Florida	1	3	1								do	5	0	5	5
Georgia	1		1					3		1	Governor	4	2	4	6
Idaho			1						5		do	5	1	5	6
Indiana			1	1	1	1	3	3	2	1	do	4	7	6	13
Iowa								3	2		do	6	0	9	9
Kansas			1	1	1	3		3		9	do	2	6	3	9
Kentucky		2	1								do	4	3	0	3
Louisiana											(1)	4	0	11	11
Maryland										7	Governor	7	0	7	7
Massachusetts			1						1		do	3	1	6	7
Michigan			1							3	Popular vote	6	1	3	4
Minnesota										5	Governor	5	0	5	5
Mississippi		2	1								do	3	0	3	3
Missouri	1	2	1												
Montana	1	1	1								Governor	4	4	0	4
Nevada	1		1	1						8	do	4	3	8	11
New Hampshire	1						2				do	3	0	3	3
New Jersey										5	Governor	5	3	5	8
New Mexico									10		do	8	0	10	10
New York	1		1					3		2	do	4	2	5	7
North Carolina	1	5	1						12		State legislature	12	0	12	12
North Dakota		1	1								do	4	7	0	7
Oklahoma			1					2		4	Governor	6	2	3	5
Oregon											do	6	1	6	7
Oregon	1	1	1								Governor	4	3	0	3
Pennsylvania			1							9	do	6	1	9	10
Rhode Island	1	1								7	State legislature	6	2	7	9

1 Indefinite.
 2 Secretary of state and attorney general.
 3 Lieutenant governor.
 4 Secretary of state, attorney general, and treasurer.
 5 Governor appoints 3 members for term of 4 years; 8 members are elected by popular vote, 1 from each Congressional district for term of 8 years.
 6 2 members selected by governor from trustees of State university.
 7 Governor, lieutenant governor, secretary of state, treasurer, attorney general, and auditor.
 8 Commissioner of agriculture and labor.
 9 Secretary of state.

TABLE 1.—*Composition of State boards of education and method of selection (1930)—Continued*

States	Ex officio members							Appointed or elected members					Total ex officio members	Total appointed or elected members	Total number on board
	Governor	Other State political officers	State superintendent of public instruction	President of State university	President of agricultural and mechanical college	President of State normal school	Other education officers	In educational work	Not in educational work	May or may not be in educational work	Appointed or selected by—	Term in years			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
South Carolina	1		1							7	Governor	4	2	7	9
Tennessee	1									9	do	6	1	9	10
Texas										9	do	6	0	9	9
Utah			1	1	1					6	do	6	3	6	9
Vermont										3	do	6	0	3	3
Virginia										7	do	4	0	7	7
Washington			1	1	1	1		3			do	2	4	3	7
West Virginia			1					3		3	do	6	1	6	7
Wyoming			1							11 6	State superintendent. ¹⁰	6	1	6	7

¹⁰ With approval of governor.

¹¹ 2 of whom must have been engaged in educational work.

Of the 42 State boards in 1930 8 are composed entirely of ex officio members, namely, Colorado, Florida, Kentucky, Mississippi, Missouri, Nevada, North Carolina, and Oregon. In these 8 States the superintendent of public instruction is a member; in 7, the secretary of state; in 6, the attorney general; in 5, the governor; in 2, the State treasurer; and in 1, the lieutenant governor. In Nevada, the president of the State university is a member of the board. The members of the boards in all these States are State officials. The number of ex officio members varies from 3 to 7. Within the decade 1920-1930, none of the States that now have ex officio State boards of education changed the size of their boards.

Eleven of the 42 State boards have no ex officio members. The boards in 9 of the 11 States are appointed by the governor, namely, California, Delaware, Iowa, Maryland, Minnesota, New Jersey, Texas, Vermont, and Virginia; in one State, New York, they are appointed by the State legislature; in Louisiana the governor appoints three members, and the people elect eight additional members.

The following table contains a list of the States that had no ex officio State board members in 1920, and a list that had no such boards in 1930.

TABLE 2.—State boards having no ex officio members, 1920 and 1930

States	Number of members, 1920	States	Number of members, 1930
California.....	7	California.....	10
Delaware.....	5	Delaware.....	5
Maryland.....	7	Maryland.....	7
Minnesota.....	5	Minnesota.....	5
New Jersey.....	8	New Jersey.....	10
New York.....	12	New York.....	12
Vermont.....	5	Vermont.....	3
		Iowa.....	9
		Louisiana.....	11
		Texas.....	9
		Virginia.....	7

Table 3 contains a list of the States in which there were partly ex officio State boards of education in 1920 and in 1930, and shows the number of ex officio and of appointive or elective members on each board:

TABLE 3.—State boards—some members ex officio, some appointed or elected, 1920 and 1930

States	Number of members, 1920			States	Number of members, 1930		
	Ex officio	Appointed or elected	Total		Ex officio	Appointed or elected	Total
Alabama.....	2	6	8	Alabama.....	2	10	12
Arizona.....	5	3	8	Arizona.....	5	3	8
Arkansas.....	1	7	8	Arkansas.....	1	7	8
Connecticut.....	2	9	11	Connecticut.....	2	9	11
Georgia.....	2	4	6	Georgia.....	2	4	6
Idaho.....	1	5	6	Idaho.....	1	5	6
Indiana.....	7	6	13	Indiana.....	7	6	13
Kansas.....	6	3	9	Kansas.....	6	3	9
Georgia.....	1	5	6	Massachusetts.....	1	6	7
Massachusetts.....	1	6	7	Michigan.....	1	3	4
Michigan.....	1	3	4	Montana.....	3	8	11
Montana.....	3	8	11	New Hampshire.....	3	5	8
New Hampshire.....	1	5	6	New Mexico.....	2	5	7
New Mexico.....	2	5	7	North Dakota.....	2	3	5
North Dakota.....	2	3	5	Oklahoma.....	1	6	7
Oklahoma.....	1	6	7	Pennsylvania.....	1	9	10
Pennsylvania.....	1	6	7	Rhode Island.....	2	7	9
Rhode Island.....	2	6	8	South Carolina.....	2	7	9
South Carolina.....	2	7	9	Tennessee.....	2	9	11
Tennessee.....	1	9	10	Utah.....	3	6	9
Utah.....	3	6	9	Washington.....	4	3	7
Virginia.....	3	5	8	West Virginia.....	1	6	7
Washington.....	4	3	7	Wyoming.....	1	6	7
West Virginia.....	1	6	7				
Wisconsin.....	2	8	10				
Wyoming.....	1	6	7				

Ten years ago there were 9 wholly ex officio State boards of education; in 1930 there were 8; in 1920 there were 26 partly ex officio boards; in 1930, 23; in 1920 there were 7 boards with no ex officio members; in 1930 there were 11 such boards.

The following table is presented to show trends with respect to the composition of State boards of education for the past 40 years:

TABLE 4.—Types of State boards of education by decades, 1890 to 1930

Type of State board	Number of States having each type of board for the years 1890 to 1930				
	1890 ¹	1900 ¹	1910 ¹	1920	1930
Wholly or mostly ex officio	20	21	20	13	12
Wholly or mostly appointed or elected	9	10	12	29	30
No State boards	19	17	16	6	6

¹ Data from the Organization of State Departments of Education, by Henry E. Schrammel. Ohio State University Press, Columbus.

The following table shows the official position held by the ex officio members in wholly or partially ex officio State boards in 1920 and in 1930:

TABLE 5.—Ex officio members

Members	Number of States, 1920	Number of States, 1930
Governor	18	15
Other State political officers	13	11
State superintendent of public instruction	30	27
President of State university	6	6
President of agricultural and mechanical college	4	4
President of one or more State normal schools	4	4
Other educational officers	1	2

Authorities on school administration have for many years advocated the appointive or elective type of State board rather than the ex officio type. During the decade 1910 to 1920 the movement was strongly toward the appointive type of board and it was thought by some that within a comparatively few years all the ex officio or even partly ex officio boards of education would be abolished and the appointive type substituted, but for some reason, or for various reasons, the movement while continuing has been slow since 1920.

State school survey commissions or survey staffs have uniformly condemned the ex officio State board. Since 1920 two of the States in which surveys have been made have abolished the ex officio boards and have created appointive boards. These two States are Texas and Virginia. The Texas survey commission said that while ex officio boards had a place in the early history of American education, they are now becoming obsolete and will some day be held as archaic as they are crude and primitive in form; that the ex officio board is not definitely responsible for educational policy, and that made up of men elected by the people and responsible to them for other

offices and duties, its members can not afford to give much time or thought to education.

In 1927 when the educational survey was made of the State of Virginia there was an ex officio State board of education. The survey staff made the following observations on that type of school board:

Under its present organization the State board of education is not accountable for its acts to the people either through appointment by the governor or election by the qualified voters of the Commonwealth. Membership on the State board of education is incidental to other official duties in the case of the governor and the attorney general. The State superintendent, while elected by the qualified voters of the Commonwealth, is responsible for his acts to the State board of education, of which he is an ex officio member and president, which board is not under the control of the people.

Educational institutions have representatives on the State board of education. These representatives are nominated for membership by institutions dependent upon the general assembly for their budget and are selected from a list of nominees by the senate, which body is a determining factor in fixing the budget of these public educational institutions.

As at present constituted the State board is likely to represent the dominant political party of the State and the institutional aspirations of its higher schools. It should represent the people of the entire Commonwealth, and should, therefore, be a lay board rather than a professional board.

An even number of members on such a board is undesirable because of the possible deadlock on important questions of educational policy.

It is a well-established administrative principle that no person whose full-time official position is within the gift of a board should be a member of the board which appoints him.

The State superintendent should not be a member of the board. It is a fundamental administrative principle that one who is to execute a policy should not be a member of the board which determines the policy.

Size of State boards.—The size of State boards of education varies from 3 to 13 members. Within the decade 1920-1930, 9 States have increased the size of their State boards: Alabama, from 8 to 12 members; California, from 7 to 10; Louisiana, from 6 to 11; New Hampshire, from 6 to 8; New Jersey, from 8 to 10; Pennsylvania, from 7 to 10; Rhode Island, from 8 to 9; Texas, from 3 to 9; Tennessee, from 10 to 11. Three States, upon the other hand, have decreased the size of their boards of education within this decade: Delaware, from 5 to 4 members; Vermont, from 5 to 3; and Virginia, from 8 to 7 members. Iowa, which had no State board of education in 1920, established a board of 9 members, and Wisconsin abolished its board of 10 members.

In 1920 the median number of members was 7 and the mode was 7; in 1930 the median and the mode were still 7. Before 1920 the median size of boards was somewhat less; in 1900, the median was 5 and the mode 3; in 1910, the median was 6.5 and the mode 3.

TABLE 6.—Size of State boards of education

Number of members	1920			1930			Total States	
	Type of board and number of States having each type			Type of board and number of States having each type			1920	1930
	Wholly ex officio	Partly ex officio	All appointed or elected	Wholly ex officio	Partly ex officio	All appointed or elected		
3	6			5		1	6	6
4	1	1		1	1		2	3
5	1		3	1		2	5	3
6		4			2		4	2
7	1	7	2	1	6	2	10	9
8		5	1		3		6	3
9		3			4	2	3	6
10		2			2	2	2	3
11		2			2	1	2	4
12			1		1	1	1	2
13					1		1	1

Term of office.—Obviously the terms of office of ex officio members who are State officials terminate at the expiration of the term for which they were elected. The terms of the ex officio State officers are usually two or four years. The terms of appointive members vary from two years to indefinite tenure in one State, Arizona.

The following table shows the length of term of appointive members for the years 1920 and 1930:

TABLE 7.—Tenure of appointive members of State boards of education

Length of term in years	Number of States		Length of term in years	Number of States	
	1920	1930		1920	1930
2	2	2	7	2	2
3	1	1	8	4	2
4	7	7	12	1	1
5	7	4	Indefinite	1	1
6	10	14			

Functions of the State boards of education.—The early State boards of education were largely of the advisory type. To-day many of them have large and responsible duties. There is, however, little uniformity in the powers and duties of the various State boards of education, varying from the advisory type, as in Massachusetts, to the legislative type with practically complete control of the State school system as in Delaware. The tendency has been to increase the functions of State boards and to centralize more authority in the State departments of education.

The generally accepted principles that more authority be centralized in State boards of education, that the function of such boards should be chiefly legislative and policy making in character, that

there should not be a multiplicity of State educational boards, and that the State superintendent of public instruction should be the chief executive officer of the State board have been emphasized in the State school-survey reports.

For example, the Institute for Government Research, in its Report on a Survey of the Organization and Administration of the State of North Carolina,¹ would abolish many of the existing boards and transfer their functions to the State board of education. Among the recommendations contained in the report upon this point are the following:

Abolish the State board for vocational education and transfer its functions to the State board of education when the constitutional change is made.

Abolish all independent boards of trustees for the teacher-training schools and vest the management and supervision of such schools in the proposed State board of education. Pending constitutional change, create one board of nine members appointed by the governor for all teacher-training institutions.

When the proposed State board of education is created, abolish the boards for the two schools for the blind and deaf and vest management and supervision in the State board.

Abolish the committee on high-school textbooks and the textbook commission and transfer their functions to the proposed State board of education.

Abolish the library commission and the board of trustees of the State library and transfer their functions to the department of education. Transfer the North Carolina Historical Commission and Legislative Reference Library to the department of education.

Transfer all clerical, executive, and stenographic work of the various professional registration boards to the department of education, where all records can be centralized in one bureau.

The State School Survey Commission of New Jersey, in recommending that the State board of education be reorganized as a commission on public education, says that such commission should have general management and control of the educational system of the State through the formulation of policies, approval of procedures, the appraisal of results, and that the board of examiners should be abolished and the approval of certification policies be placed wholly with the commission on public education.

The West Virginia survey staff recommended that the State board of education should have general control of all the educational interests of the State with the State superintendent of schools as the chief professional and executive officer of the school system. "In this way," according to the survey staff, "the State may achieve the unity and centralization of authority which are most sorely needed in the present system of education in West Virginia."

¹ Report of a Survey of the Organization and Administration of the State Government of North Carolina. Washington, D. C., Institute for Government Research of the Brookings Institution, 1930.

The survey staff of West Virginia in a summary of its findings, says:

A review of the findings in regard to the power which the State is exercising in the control of education in West Virginia leads us to conclude that the various representatives of State control have and exercise about the proper amount of authority that the State should exercise. This authority, however, is in the hands of different boards or representative bodies, namely, the State board of education, the board of governors of the West Virginia University, the State board of control, and the State superintendent of free schools.

The influence which the State should exert in the control of educational affairs is seriously impaired by the divided authority, the duplication of responsibility, and the lack of coordination inherent in any such plan of organization. Under such an organization it would be the rarest of accidents for any State to secure anything approaching a fixed and unified policy of education. There is no evidence to show that West Virginia is an exception to the rule. The division of financial control between the State board of education and the board of control tends to duplication of functions, rivalry, and interference with State educational policies. The duplication of responsibility between the State board of education and the State superintendent makes for relegation of responsibility and vacillation of action. The division of authority over separate units of the educational system such as we find in the board of governors and the State board of education is already presenting difficulties over matters of common interest such as standards of teacher-training and entrance requirements.

The Texas School Survey Commission made the following recommendation:

A new State board of education for Texas should be assigned by statutory law a number of administrative duties usually given to State boards, and those now given direct to the State superintendent should be transferred to the board. Not that the actual carrying out of these duties will not fall to the superintendent, but they properly and legally do so only by being delegated to him by the board. This is necessary in order to place final responsibility upon the board for the entire educational program. The board is, in no case, an administrative or executive entity; but it is, through its chosen executive, ultimately responsible for all administrative policy.

Legislation within the biennium with respect to the powers of State boards of education illustrates the tendency toward increasing the powers and duties of such boards. The Legislature of California, for example, provided that the State department of education shall be administered through the State board of education, which shall be the governing and determining body of the department, and that the State director of education shall be the executive officer of the State board. It also authorized the State board of education, upon recommendation of the State director of education, to establish such divisions in the State department as in the judgment of the board are necessary. It also empowered and directed the State board of education to elect on nomination of the State director of education, the presidents and principals of teachers colleges and other schools governed by the State department; to take jurisdic-

tion of any district high school that is not supported in whole or in part by district taxes and to appoint a qualified person to exercise immediate supervision over such schools, and to fix standards for school sites.

In Delaware the legislature authorized the State board of education, after consultation with the local board of school trustees, to determine the number of grades to be taught in a given school.

The Legislature of New Mexico directed the State board of education to set up a bureau of textbook distribution and property accountant to contract with and order from publishers textbooks for the use of first and second grade pupils in the public schools and provided that all costs of such textbooks be paid out of the State common-school fund.

In Oklahoma the legislature abolished the State board for vocational education and vested its powers and functions in and under the control of the State board of education and designated the State superintendent of public instruction as the director of vocational education, and it vested in the State board of education the matter of examination and certification of all teachers, abolished the county and city examining boards, and repealed the county and city certification law.

In Michigan the county teachers' certification law was repealed and teacher certification was centralized in the State superintendent of public instruction and the State board of education.

Minnesota vested teacher certification solely in the State board of education.

The State board of education of Texas was given the following additional functions and duties: (1) To consider and report biennially to the governor on the financial needs of the public free schools; (2) to recommend to the governor concerning proposals for the establishment of new educational institutions; (3) to consider and report on the financial needs, scope, and work of State institutions of higher learning, and to recommend such changes in their courses of study as the needs may warrant with especial reference to elimination of any needless waste or duplication of work; (4) to select a textbook committee of five experienced and active educators in the public schools of the State to examine books submitted for adoption, and to recommend thereon to the State board; (5) to consider the athletic necessities and activities of the public schools and to report biennially to the governor the proper legal division of time and money to be devoted to athletics; (6) to prescribe rules and regulations for the certification of teachers and for examining applicants for such certificates in accordance with the State laws. (U. S. Office of Education, Bulletin, 1931, No. 20, "Review of Educational Legislation," by Ward W. Keesecker.)

THE STATE SUPERINTENDENT OR COMMISSIONER OF EDUCATION

Method of selection.—For years authorities on State school administration have been recommending that the State superintendent of public instruction should be appointed by the State board of education. These recommendations have, however, received but little consideration, judging by the number of States in which the State superintendent is still elected by the people. In 1890, this official was elected by popular vote in 29 States; in 1910, in 32 States; in 1920, in 34 States, and in 1930, in 33 States. In Idaho and Wyoming where there are two State officials, a State superintendent of public instruction and a commissioner of education, the superintendents are elected by the people and the commissioners are appointed by the State boards of education.

In 1890, according to Dr. Henry E. Schrammel's *The Organization of State Departments of Education*, five methods of selecting the chief State school official were employed, namely, election by popular vote, appointment by the governor, appointment by the State board of education, appointment by the State legislature, and appointment by the supreme court. By 1920, the number of methods of selecting the chief State school official had been reduced to three—election by popular vote, appointment by the governor, and appointment by the State board of education. In 1930, these same three methods obtain.

Of these methods, appointment by the State board of education made the greatest proportional gain from 1890 to 1930, as may be noted from the following table, but even now the State superintendent of public instruction is appointed by the State board in only eight States.

TABLE 8.—*Method of selecting chief State school officers*

Method employed	Number of States			
	1890 ¹	1910 ¹	1920	1930
Election by popular vote.....	29	32	34	33
Appointment by the governor.....	18	10	6	7
Appointment by the State board.....	3	4	8	18
Appointment by the legislature.....	3	1		
Appointment by the supreme court.....	1			
No chief school official.....	2	1		
Unorganized territory.....	2			

¹ Data from *The Organization of State Departments of Education*, by Dr. Henry E. Schrammel.

¹ Territory.

² Territories.

³ A Territory.

⁴ 10 States, including commissioners of education in Idaho and Wyoming.

Within the decade Virginia changed from popular election to appointment by the governor. Louisiana, by a constitutional amend-

ment in 1921, changed from election by the people to appointment by the State board, but in 1922 the constitution was again amended and provided for the election of the State superintendent by popular vote.

State school survey commissions have uniformly condemned the elective method and recommended appointment by the State board. The following recommendation made by the Virginia State school survey staff is typical of the recommendation contained in other State school survey reports on the selection of the State superintendent of schools:

It has been demonstrated repeatedly that the political method is not the proper one for securing expert service of any type. At the time that the office of State superintendent was created in our American commonwealth it was a clerical and statistical position, and not one of the expert character which it now has become. It should be removed from partisan politics. Candidacy to the office should not be limited to the State. The superintendent should not be placed in a position where political considerations may influence his decisions.

Term of office.—From 1890 to 1920 the tendency was to increase the length of term for which the chief State school officer was elected or appointed, but from 1920 to 1930 only one State increased the term, Nebraska having changed from 2 to a 4-year term. The tendency may be noted from the table that follows:

TABLE 9.—*Term of office of chief State school executives*

Length of term in years	Number of States				Length of term in years	Number of States			
	1890 ¹	1910 ¹	1920	1930		1890 ¹	1910 ¹	1920	1930
1.....	2	1	2	2	5.....		1	2	2
2.....	20	21	14	13	6.....			1	1
3.....	5	3	1	1	Indefinite.....	1	2	4	4
4.....	15	19	24	25					

¹ Data from "The Organization of State Departments of Education," by Dr. Henry E. Schrammel.

² Six, including commissioners of education in Idaho and Wyoming.

Staff members.—Before the decade, 1910–1920, State departments of education consisted for the most part of the State superintendent and a few clerks. In 1910, the median number of members of the State school department was 5; in 1920, 19; and in 1930, 28 members. In 1910 the size of staff varied from 1 to 265 members; in 1920, from 8 to 437; and in 1930, from 8 to 594. In 1910 the total number of members for all State departments of education was 534; in 1920, 1,614; and in 1930, 2,526. The per cent of increase in number of members for the decade, 1910–1920, was 202.2, and for the decade, 1920–1930, the per cent of increase was 56.5.

The increase or decrease in membership in each of the State departments of education for the decade, 1920-1930, is shown in the following table:

TABLE 10.—Number of staff members in each State department of education¹

States	1920	1930	States	1920	1930
Total for United States.....	1,614	2,520	Montana.....	10	14
Alabama.....	35	54	Nebraska.....	19	25
Arizona.....	14	11	Nevada.....	11	15
Arkansas.....	14	32	New Hampshire.....	20	20
California.....	46	169	New Jersey.....	34	67
Colorado.....	10	11	New Mexico.....	14	12
Connecticut.....	96	134	New York.....	437	794
Delaware.....	8	38	North Carolina.....	31	62
Florida.....	17	24	North Dakota.....	10	16
Georgia.....	13	29	Ohio.....	27	74
Idaho.....	15	15	Oklahoma.....	14	41
Illinois.....	32	60	Oregon.....	11	8
Indiana.....	19	78	Pennsylvania.....	70	171
Iowa.....	17	14	Rhode Island.....	13	14
Kansas.....	15	37	South Carolina.....	27	28
Kentucky.....	19	25	South Dakota.....	17	17
Louisiana.....	25	30	Tennessee.....	15	15
Maine.....	19	20	Texas.....	54	70
Maryland.....	13	33	Utah.....	14	16
Massachusetts.....	114	159	Vermont.....	10	14
Michigan.....	32	47	Virginia.....	22	51
Minnesota.....	44	54	Washington.....	20	26
Mississippi.....	23	26	West Virginia.....	14	23
Missouri.....	19	26	Wisconsin.....	31	41
			Wyoming.....	10	17

¹ National Education Association, Research Division, Staff and Salaries of State Departments of Education. (Studies in State educational administration, No. 9, 1931.)

² Excludes curriculum advisor and high-school inspector who are shared by the University of Idaho and the State department.

³ Not counting unskilled laborers and janitors.

⁴ Includes unskilled laborers and janitors.

⁵ Except stenographers, clerks, and messengers.

A comparison of the number of professional staff members of State departments of education listed in the directories of the Office of Education for the years 1925 and 1930 shows that the additions to the staff have been made in many fields, especially in secondary, elementary, physical, adult, and special education; and in library work, research and statistics, teacher training and certification, and school buildings.

LOCAL SCHOOL ADMINISTRATION

Although it is the function of the State to educate its children, the schools are administered through smaller units under the control of boards of education. There are various types or classes of these local units, such as the county, city, town, township, common-school district, consolidated, central, community, joint union graded, union high, county high, and township high. The units may, however, be classified in general as county, city, town, township, and district.

Authorities on school administration are generally agreed that the local unit for the administration of schools should be larger than the small district found in many of the States, but they are not

entirely agreed upon what the larger unit should be. Some favor the county and others what they term the "community unit." For most of the States in which state-wide educational surveys have been made, the commissions or survey staffs have recommended the county unit; in several States the survey commissions have recommended the community unit. The trend in practice has been toward two types of larger units, the county and the consolidated school district.

THE COUNTY

Within the decade, the movement to organize the schools with the county as the unit of administration has gone forward to some extent, but no State has recently reorganized its schools on a state-wide county unit plan. Several States have enacted optional county unit laws, but these are usually applicable only to certain classes of counties. In 1927 the Legislature of Arkansas authorized counties with 75,000 or more population, upon petition of 100 or more electors, to question whether the school districts outside of cities of more than 10,000 population shall be formed into one county school district. If a majority vote in favor of a county district, all the schools outside of cities having a population of more than 10,000 shall be under the control of the county board of education.

In 1929 the Legislature of Arkansas authorized an election in all but two counties by popular vote to consolidate all local and special school districts into one school district embracing all the territory of the county, but the supreme court of the State held that this act of 1929 was unconstitutional.

The Legislature of Texas in 1923 authorized counties having a population of 100,000 or more to adopt by election the county unit form of school administration. The counties eligible to adopt the county unit system under the provisions of this act are Bexar, Dallas, El Paso, Harris, and Tarrant. Up to the present time none of these counties appears to have adopted the provisions of this act. In 1927 the legislature of the State vested in county boards of education in counties containing more than 1,100 square miles and having a population from 40,000 to 100,000 complete control of the schools in these counties. This act apparently applies only to Williamson County. It also vested in county boards in counties having 210,000 or more population authority to subdivide or consolidate school districts. This act applies to Dallas County only, which under this act has developed a county unit system. In 1929 a law was enacted that provided for the creation of a common-school district to include the whole county of Terrell.

In 1925 the Legislature of Montana authorized counties, upon petition of 20 per cent of the electors in third-class school districts, to vote on the question of establishing a "county unit system for rural schools." The county rural-school district is, however, divided into four local districts administered by local trustees for the purpose of management, control and custody of property.

In 1929 the Legislature of Washington authorized the formation of county-school districts in counties having but one high school by providing that when 10 per cent of the electors in any county petition therefor, and when such petition is approved by both the superintendent of schools of said county and by the State superintendent, the county commissioners shall submit the question to the electors of the county at the next general election. If a majority vote in favor of a county-school district, such district shall be formed, and the board of county school directors shall be composed of three members, one from each of the county commissioners' districts, and shall be chosen by the electors of the county at the general elections.

The Legislature of Minnesota in 1921 vested in a county board of education the management and maintenance of schools in unorganized territory in counties where such territory is situated, and in 1925 it authorized the county board of commissioners to dissolve any common or independent school district when petitioned by a majority of the voters of the district and upon the approval of the county superintendent, and provided that any district having less than 10 scholastics may be automatically dissolved by the county board of commissioners and become a part of the unorganized territory.

In 1927 the Legislature of Minnesota authorized any county with fewer than five school districts and containing a school district with 10 or more townships which comprise more than one-half of the area of the county to form, upon approval of the electors, a county-school district. In 1929 the legislature of the State authorized any county having less than seven school districts to elect to consolidate such districts into one county-school system.

Within the decade the attempts made in several other States to secure legislation for some form of county-unit system failed. For example, the Legislature of Missouri in 1922 enacted that the rural schools of the State be placed under county-unit organization, but soon after the passage of the act a referendum petition was circulated, the necessary number of signatures obtained, and the act was accordingly referred to the people who rejected it.

That there is a widespread interest in the county unit of administration is evidenced by the fact that practically every school survey report issued since 1920 states that the county is the most desirable unit of school administration for the States in which educational surveys have been made. Several reports, however, recommend the

community unit.² Recently the Oregon Education Plan Committee made the following recommendations regarding a larger unit of administration for that State:³

*Objective (1935).—*No independent-school units in operation which have enrollments of less than 500 in grades 1 to 12.

*Recommendations.—*1. That this association place itself on record in favor of the large unit organization as the most reasonable unit of school administration to adopt for the improvement of the school situation in Oregon at the present time.

2. That as a step toward the large unit there be created in each county not now operating county units, a county board of education, this board to appoint a county superintendent and such supervisors and assistants as will guarantee effective administration and supervision of the schools within the county. The county superintendent would be chosen on the basis of professional training and administrative ability, at such salary as would be necessary to attract a thoroughly competent individual.

3. That both the profession and the public be completely informed as to the working and effectiveness of the county unit both in Oregon and in other States.

4. That the large unit be considered as an intermediate step toward a State system of schools.

*The county superintendent of schools.—*Although the county is the unit of administration in comparatively few States, 39 of the 48 States provide for county school superintendents. The States that do not have such superintendents are the six New England States, and the States of Delaware, Nevada, and New York. In many States the administrative duties of the county superintendent are comparatively few, their duties being largely of an advisory and supervisory nature; but through legal enactments the tendency has been to increase the administrative duties of county superintendents by giving them more authority in such matters as the enforcement of the compulsory attendance laws, the appointment of assistant county superintendents and of supervisors, the apportionment of school funds, and the preparation of the budget. The authority to grant teachers' certificates has been gradually taken away from the county superintendent. At the present time the laws of only a very few States authorize the county superintendents to issue certificates of any grade.

The tendency has been to strengthen the office of county superintendent through legislative enactments authorizing the employment of assistant county superintendents, county school supervisors, and clerical assistance. The number of States which by law allowed assistant county superintendents increased from 3 States in 1880 to

² See United States Office of Education Bulletin, 1930, No. 35, School Administration in State Educational Survey Reports.

³ Report of the Oregon Education Plan Committee. Oregon State Teachers' Association, 1930.

7 States in 1909, and to 32 States in 1930. In 1905 none of the State school laws made provision for the employment of county school supervisors. In 1930 there were 15 States that made such provision. In 1905 there were only two States, Louisiana and Maryland, which by law authorized the employment of clerical assistance for the county superintendent. At the present time such assistance is authorized in 32 States.⁴

In a majority of the States, the county superintendent has been from the beginning and still is elected by the people. At present this officer is elected by the people in 25 States; he is appointed by the county board in 9, the State commissioner of education in 1, the township school directors or trustees in 2, the representatives of school districts in 1, and the county court in 1. Since 1920 only one State has changed its method of selecting the county superintendent, Virginia having changed from appointment by the State board of education to appointment by the county, or divisional, board of education.

Although authorities on school administration and State school survey commissions have been recommending that county superintendents be appointed by a county board, there has been no recent legislation making the county superintendency an appointive office. The following quotation from the Texas State school survey report regarding the election of county superintendents by the people is typical of similar recommendations contained in other State school survey reports:

It is unfair to the educational interests of country children that the highest educational officer who is directly serving them should be chosen by popular election when experience has demonstrated that the deliberations of a representative board, such as the county-school trustees, as a rule result in the selection of individuals who are better prepared to carry the responsibilities of the office. Texas, in common with many other States, needs such provisions as shall make for the choice of well-prepared men and women for the administration and supervision of the rural schools. Popular election sometimes results in the election of such persons, but it is not a system especially well designed to secure that result.

THE CONSOLIDATED SCHOOL

One method of enlarging the unit of administration is by means of the county unit; another method is that of consolidating two or more school districts into one administrative unit. This latter method is employed in many of the States, especially in those States having the district system.

⁴ Newson, N. William. The Legal Status of the County Superintendent. A doctor's dissertation. School of Education, New York University.

The number of consolidated schools has been increasing rapidly. From 1920 to 1930 the number of such schools increased from 11,890 to 17,004, and the number of 1-room schools decreased from 187,948 to 153,306. These figures, however, do not show the number of larger school districts that have been formed through the consolidation of two or more districts.

In some States the term "consolidated school" is applied when two or more schools are abandoned and a larger one organized to take their places. In those States having the county, town, or township unit of administration the consolidation of small schools within the unit does not result in a larger unit of administration and support. The unit of administration and support remains the same whether there are twenty 1-room schools or whether all these are brought together into one plant. In those States in which the small school district is the unit of administration and support, the consolidation of two or more of these districts does result in a larger unit. The ultimate size of the unit depends upon the number of districts entering into the consolidation. It would be possible for all the districts within a country to consolidate and thus form a county system. For example, Roscommon County, Mich., has almost effected a county-school system by the consolidation of township-school districts. There are only two school districts in the county at present as compared with six districts three years ago when an active campaign for consolidation began.

The following information compiled from the reports of State superintendents of public instruction indicates the trend in the matter of consolidating school districts. In Arkansas, there were in 1920, 5,118 school districts; in 1925, 4,866; and in 1928, 4,598, making a reduction of 520 districts within the 8-year period. The State superintendent says in his biennial report for 1926-27, 1927-28: "It has been the policy of the department to recommend to superintendents and boards of education a careful study of the entire county with a view of a future county-wide program of consolidation, a plan that offers a maximum amount of school efficiency to all the children at a minimum cost."

In 1928, there were in Kansas 179 consolidated districts which had been formed from 522 districts.

In Michigan, the rural agricultural school act giving special State aid to consolidated schools for both maintenance and the transportation of pupils became operative in 1919. The State superintendent reported in 1929 that during the 10 years that this law had been in operation, 61 consolidated districts meeting the State requirements for special aid had been organized. The 61 consolidated schools replaced three hundred and eight 1-room schools.

In the State of New York, it is stated in the report of the commissioner of education of that State for the year 1929-30 that—

The organization and establishment of central-school districts in cooperation with and at the request of the majority of the voters in the districts affected have made steady progress. During the period July 1, 1928, and June 30, 1929, 13 central schools were organized. The total number of such districts in the State July 1, 1929, was 56.

According to the procedure outlined by the State education department on the organization of central rural districts—

A central-school district should consist of a group of existing districts around a natural and logical center, and such central district should include all the territory that reasonably may be included therein. The social and economic community interests and activities of the people will be an aid in determining the extent of the territory that should be included in such central district. Central-school districts must possess resources in population and taxation sufficient to insure well-organized graded instruction in both elementary and high school subjects.⁵

The State commissioner of education says that three years' experience with the central rural school proves that it has the following advantages over the older organization of schools in rural areas:⁶

1. *Better teaching.* The central rural school commands a better teacher for the same money than is attracted to the average one or two teacher school.

2. *Better supervision.* (a) The district superintendent with four to eight central districts has a much better opportunity than he has with 35 to 75 different districts. This applies to his influence both on teachers and trustees or board members. (b) The central school gives each teacher daily access to a well-trained principal, whereas under the common-school district organization there are now 7,500 teachers who see their supervisory officer on the average less than five times a year. (c) It is possible to provide special teaching-supervisory services for central schools, such as music and art teachers, whereas it is not feasible to provide such services for a widely scattered 1-teacher school organization.

3. *Richer, social life for adolescent pupils.* Boys and girls in the teens need a wide acquaintance with boys and girls of their own age; such association is part of their education. The larger school gives wider opportunity for dramatics, athletics, public speaking, clubs, and every kind of organized activity.

4. *A broader high-school curriculum.* The central district provides transportation free to the individual pupil; it draws pupils into the central school at the beginning of the seventh grade before they have felt the urge to drop out of school; therefore, the central school has a much larger high-school enrollment than the village school in the same community would have if standing alone. In fact, centralization usually increases the high-school enrollment from 50 to 100 per cent. This increased enrollment draws larger State funds and so makes possible a richer curriculum or better teachers or both. The

⁵ Central Rural Schools. University of State of New York, Albany, N. Y., Bulletin No. 882, August, 1927.

⁶ Twenty-Sixth Annual Report of the Education Department of the State of New York, 1930.

25 per cent building quota enables the central district to provide building space for activities that could not be provided for without such a quota. Both these factors contribute to a better junior and senior high school offering than can be expected from the union free-school district that has to depend upon tuition pupils for its extra revenues.

5. *Rural control.* So long as the common-school districts depend upon contract with village schools, or upon the tuition system for educating their children of high-school age, they will have to accept a school planned by others, not always in sympathy with rural interests. In the central rural-school district, the farming or other rural elements of the population have their representatives on the board, and through them have a voice in determining how their money should be expended and the kind of school they shall have. The central rural school turns, for the first time in the history of the State, the control of secondary education in rural areas to the people most vitally interested.

In Oklahoma, the number of independent districts increased during the biennium 1928-1930 from 351 to 355, and the number of rural districts decreased from 4,644 to 4,578. The State superintendent in his report for 1928-1930 says regarding this change:

The decrease in the number of the rural districts is due to several causes. As the towns become incorporated and the high schools located therein are fully accredited for four years of work, these districts automatically become independent. Several of these districts enter into each consolidated district that is organized and into each union graded organization. Rural districts are attached to adjacent independent districts and to existing consolidated and union graded districts. These changes leading to a decrease in the number of districts and to an improvement in the organization and efficiency of the schools attended by the children are evidences of healthy growth in the rural schools.

He also says:

Better roads and rapid modes of transportation have rendered obsolete the little community of past decades, and have substituted a larger community, generally surrounding a town. To this town the people go for trading, entertainment, and religious worship. It is logical that the school community should also be enlarged to meet the demands of the new social organization.

The foregoing data indicate a movement toward the consolidation of districts, but judging from the number of school districts still remaining in most of the States the movement toward district consolidation has resulted in comparatively few large administrative units, as may be noted from the following data compiled from the recently published reports of 11 State departments of education.

In Iowa there are 402 consolidated districts, 1,015 school townships, 652 independent, city, town, and village districts not consolidated, and 2,802 rural independent districts. The total number of districts in the State is 4,871, under the control of 21,147 school directors. In Michigan there are 6,873 school districts. Of these, 125 are city, 655 graded, and 6,093 ungraded school districts. Kansas has 7,139 school districts maintaining 1-teacher schools. In Illinois there are

10, 142 districts having 1-room country schools. Of the 7,707 school districts in Minnesota, 7,203 are ungraded elementary-school districts. In Pennsylvania, in which the city, the borough, and the township are the units of administration, there are 2,581 school districts, 2,345 of which are fourth-class districts—townships and boroughs having under 5,000 population. Texas has 6,839 common-school districts. In Oklahoma there are 4,578 rural-school districts and 351 independent districts. The total number of school districts in Nebraska is 7,251. Missouri has 7,758 rural-school districts. Of these 7,352 have one teacher; 317, two teachers; 43, three teachers; and 46 have four or more teachers. In South Dakota there are 3,072 rural-school districts, 260 independent city and town districts, and 94 consolidated districts.

The total number of small rural-school districts within these 11 States is approximately 65,000. Although the movement to consolidate school districts has been going forward, there is still much work ahead for State departments of education and for county school superintendents if they are desirous of reducing the number of school districts and of organizing larger units for administration and support. Many questions arise. Among them are: Should the county by legislative enactment be made the unit of administration? If it should be made the unit, should the cities be included? If the county should not be made the unit by legislative enactment, should larger units of administration be formed through the slow process of consolidating school districts by a vote of the people? Before these and many other questions can be answered satisfactorily, careful studies of every factor involved will be necessary. Possibly no other American school problem is in greater need of a thorough study than is the local unit of school administration.

CITY-SCHOOL SYSTEMS

Within the biennium, and even within the decade 1920-1930, there have been few changes in the general or external administration of city-school systems, such as changes in method of selecting members of boards of education, size of boards, length of term for which elected, and the fiscal relationship to city government. Most of the changes in these respects were made between 1900 and 1920.

The principal changes in the administration of city schools within the past 10 years have been those effected by boards of education and its administrative staff. These changes have related to the administrative organization and to the organization within the schools themselves.

One of the outstanding movements among city boards of education is to simplify the administrative organization by reducing the number of standing committees or by abolishing them entirely. Not so

many years ago it was customary for boards of education to appoint numerous standing committees. To-day many boards are organized without such committees. Although no data have been compiled on the subject since 1927, the movement to reduce the number of committees apparently is still going forward. In 1927, 25 per cent of the boards of education in cities having a population between 30,000 and 100,000 had no standing committees and 38.2 per cent of the boards of education in cities having a population of 100,000 or more had no such committees.

A comparison of the number of standing committees in these two groups of cities in 1917 and in 1927 shows a substantial reduction in number as may be noticed from the following tables. Table 11 contains data for all cities reporting in 1917 and in 1927; and Table 12 contains data for those cities only that reported both in 1917 and in 1927.

TABLE 11.—Number and per cent of city-school districts having specified numbers of standing committees in 1917 and in 1927

Number of committees	Number of city-school districts							
	100,000 or more population				30,000 to 100,000 population			
	1917	Per cent	1927	Per cent	1917	Per cent	1927	Per cent
0.....	3	7.3	21	38.2	12	9.1	35	25.0
1.....	0	0.0	1	1.8	4	3.1	8	5.7
2.....	9	22.0	4	7.3	8	6.1	17	12.2
3.....	5	12.2	6	10.9	24	18.3	17	12.2
4.....	5	12.2	10	18.2	18	13.7	14	10.0
5.....	5	12.2	5	9.1	20	15.3	16	11.4
6.....	5	12.2	2	3.6	16	12.2	9	6.4
7.....	4	9.7	4	7.3	13	10.0	9	6.4
8.....	1	2.6	1	1.8	6	4.6	9	6.4
9.....	4	9.7	1	1.8	10	7.6	6	4.3
10 or more.....								
Total.....	41	100.0	55	100.0	131	100.0	140	100.0

TABLE 12.—Number and per cent of city-school districts having specified numbers of standing committees in 1917 and in 1927 (only those reporting at both dates)

Number of committees	Number of city-school districts							
	100,000 or more population				30,000 to 100,000 population			
	1917	Per cent	1927	Per cent	1917	Per cent	1927	Per cent
0.....	0	0.0	9	36.0	0	0.0	16	25.6
1.....	0	0.0	1	4.0	1	1.8	3	5.4
2.....	6	24.0	3	12.0	4	7.1	6	10.7
3.....	2	8.0	3	12.0	13	23.2	4	7.1
4.....	4	16.0	4	16.0	6	10.7	4	7.1
5.....	3	12.0	2	8.0	11	19.7	8	14.3
6.....	3	12.0	0	0.0	8	14.3	7	12.5
7.....	3	12.0	2	8.0	6	10.7	4	7.1
8.....	2	8.0	0	0.0	1	1.8	2	3.6
9.....	2	8.0	1	4.0	6	10.7	2	3.6
10 or more.....								
Total.....	25	100.0	25	100.0	53	100.0	56	100.0

The median number of standing committees in the 25 cities of 100,000 or more population reporting both in 1917 and in 1927 was 6 in 1917 and 3 in 1927. In the 56 cities between 30,000 and 100,000 population reporting at both dates, the median number of committees in 1917 was 6, and in 1927 the median number was 4.

The administrative organization of city-school systems is in process of further simplification by making the superintendent of schools the chief executive officer of the board of education. In the earlier days the dual system—a superintendent in charge of professional matters and a business manager in charge of business affairs—was in vogue. Although the movement to organize on the unit plan may not have gone forward so rapidly as its advocates would have liked, the tendency has been to assign business affairs to an official variously designated as business manager, business agent, purchasing agent, secretary, or assistant superintendent in charge of business, and to make him directly responsible to the superintendent of schools. This plan of organization has been recommended by all the city school survey commissions in their discussion of the relationship that should exist among the members of the executive staff.

The problem of the organization for the supervision of instruction in city-school systems has received much attention. The Eighth Year Book of the Department of Superintendence of the National Education Association, which is devoted to various phases of supervision, sets forth progressive practices. One chapter describes the three general types of supervisory organization in operation. These are the line-and-staff, the dual, and the coordinate.

In the line and staff organization the principal is a line officer, to whom the teachers are directly responsible. The supervisor is a staff officer, acting in an advisory capacity, with no direct authority over teachers. In the dual organization the teacher is directly responsible to both principal and supervisor—to the principal for school management and to the supervisor for methods of instruction. The coordinate type involves both the line-and-staff and the dual organization. This type of organization does not attempt to separate supervision and administration so distinctly as do each of the other types.

Possibly no city follows any one of these plans exclusively, but data recently compiled by the Office of Education show that the line-and-staff organization is in operation in more cities than is either of the other plans. Of 54 cities having a population of 100,000 and more reporting, 30 have the line-and-staff, 14 the dual, and 10 the coordinate type. Of 112 cities having a population between 30,000 and 100,000 reporting, 47 have the line-and-staff, 34 the dual, and 31 the coordinate plan of supervisory organization.

According to the Seventh Year Book of the Department of Elementary School Principals—

Modern practice tends to convert the general supervisor into an assistant superintendent, deputy superintendent or similar officer with administrative authority from the superintendent. Under ideal conditions he works through principals in securing school improvement. The special supervisor is tending to become in progressive theory and practice an expert instructor of teachers and the technical adviser of principals. He may be a supervisor of writing, art, music, special classes, industrial classes or some other specialized activity.

In school systems where the progressive theory indicated above is practiced the activities of principals and supervisors are more readily coordinated. Assistant superintendents direct, guide, and advise principals in accordance with delegated authority. Special supervisors instruct teachers in better technic and advise with principals in reference to the supervision of their respective subjects. Conferences among groups keep all persons informed as to objectives and prevent misunderstanding.

One of the significant movements in city school administration worthy of note is the rapid growth in the number of research bureaus or departments.⁷ According to data recently compiled by the Office of Education there were 2 such bureaus in 1912, 49 in 1922, and 119 in 1930. The functions of the earlier research bureaus were comparatively few, and the staff of each was small. To-day most of these bureaus perform many functions. Among these are testing, curriculum making, guidance, surveys, experimental studies and financial studies. The size of the staff of full-time workers ranges from 1 to 48. The average size in cities having a population of 100,000 or more is 5.5, and in cities having fewer than 100,000 the average size is 2.3.

Among the many other movements in the administration of city school systems that are receiving thoughtful attention and that are going forward are provisions for individual differences in children by means of ability grouping, individual instruction plans, and special classes; the organization of junior and senior high schools and junior colleges; the platoon plan; and curriculum revision.

⁷ United States Office of Education Leaflet No. 2, Organization and Functions of Research Bureaus in City-School Systems.

II. PUBLIC-SCHOOL FINANCE

By TIMON COVERT

Specialist in School Finance

Growth in a governmental service renders that service more expensive to the taxpayers. This is strikingly evident in a review of public-school finance in the United States over any period of time for which relevant data are available. What thinking American can read: "\$63,000,000 spent for elementary and secondary education in 1870, more than two hundred millions in 1900, and approximately two and a half billion dollars in 1930," without attempting to visualize the progress of American education since Civil War days? In most cases taxpayers realize in a vague way that expenditures for education are increasing and will probably continue to increase. Few take the trouble to analyze the situation carefully. Some object to costly improvement, but most people loyally continue to support the schools.

FACTORS INFLUENCING EXPENDITURES FOR EDUCATION

Increasing school costs result from a number of causes. Just how much of the increase may be attributed to influences outside of educational development, such as higher living standards and variation in cost of living, no one can determine with absolute certainty. However, we know that many comparatively costly conveniences now considered essential for the average salaried individual were unheard of a few years ago. And statistics show that many necessities of living are considerably higher in price than they were in pre-World War days.

INFLUENCES FOR WHICH THE SCHOOLS ARE NOT RESPONSIBLE

Computation by the National Industrial Conference Board¹ placed the purchasing value of a dollar in November, 1929, at 61 per cent of its value in July, 1914. The United States Bureau of Labor Statistics shows that in 1929 it cost 171 per cent as much to live in

¹ National Industrial Conference Board. *Cost of Living in the United States, 1914-1929*. P. 142.

the average community of the United States as it did in 1913. The close of the decade witnessed a reduction in living costs.

Table 1 presents the expenditures for education at different dates as compared to the purchasing power of these amounts. The indexes of the cost of living are based on such items as food, rent, clothing, fuel, light, house furnishings, and miscellaneous. In the light of these data it is evident that a considerable part of the increase since 1913 is due to higher-priced commodities; on the other hand, as already stated, we find a reduction in living costs since 1920 when the peak was reached.

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

Year	Expenditure (in millions of dollars)	Index of cost of living	Purchasing power of amounts in column 2 (in millions of dollars)
1	2	3	4
1913.....	\$522	100	\$522
1918.....	764	174	438
1920.....	1,036	200	518
1922.....	1,580	169	935
1929.....	2,237	171	1,308

¹ Estimated.

FACTORS RELATING TO EDUCATIONAL DEVELOPMENT

Attendance, length of term, scope of program, and salary schedule are some of the most important factors in the advancing cost of education. It is apparent to anyone familiar with the increase which has taken place in public-school attendance, even during the last 10 years, that large expenditures are required to provide housing facilities and instructional service for so many additional children. It is equally evident that large expenditures are necessary as a result of lengthened terms and higher salaries for teachers. The increasing amount and quality of service rendered by the schools, while just as much in evidence, are less frequently recognized as a cause for advancing expenditures.

Influence of widened functions.—Present-day living customs are shifting more and more burdens of rearing children from the home to the school. Activities which a short time ago were considered extracurricular are now a regular part of the educational program. The modern school is no longer a mere place of instruction. It is an institution of increasing complexity in which are centered many activities for the physical, mental, and moral development of our

children. These additional burdens demand much in the way of curriculum offerings, professionally prepared teachers, buildings, and equipment that the schools of yesterday were not obliged to supply.

We find that the annual expenditure for the promotion of health among school children, for the transportation of pupils, and for instruction in kindergartens more than doubled between 1920 and 1928. During the same time expenditure for school libraries increased from \$3,000,000 to five and a half millions. Funds appropriated for the education of crippled children are constantly increasing. For example, State aid to the amount of \$100,000 annually has been available since 1927 in Wisconsin for this purpose; the 1929 Michigan Legislature, in appropriating \$400,000 for schools for crippled children for the two years 1930 and 1931, more than doubled the amount of such funds provided for the previous biennium; and in Maryland the same year legislation was enacted which provides \$2,000 State funds annually for each approved class of at least 10 physically handicapped children. There are continual demands on the schools for service of many additional types. As the schools are equipped to meet these growing needs the costs increase.

Influence of attendance increases.—Average daily attendance in public schools increased more than 100 per cent from 1900 to 1930, chiefly as a result of total population increase, enactment and operation of compulsory education laws, and the universal acceptance of secondary education as a part of our common-school system. The population of the United States in 1900 was approximately twice what it had been 80 years before. It has not doubled since 1900, but the increase has been large. Sixty years ago 17.8 per cent, or 1 in every 5.6 persons in our population, was enrolled in public school; now 21 per cent, or 1 in every 4.8, is enrolled.

Sixty years ago compulsory attendance laws were in force in only 2 States; 50 years ago they were in force in 16 States; 40 years ago, in 26 States; 30 years ago, in 32 States; 20 years ago, in 41 States; and by 1918 all States had such laws. Amendatory legislation enacted in several States since has extended the time of required school attendance. It is evident, therefore, that attendance increased greatly as a result of legal compulsion. Meanwhile, however, the rapid spread of high schools, particularly since 1900, induced many children to remain in school beyond the required age. In 1900, 519,251 pupils were reported in public high schools; in 1910 the number had increased to 915,061; in 1920 to 2,199,389, and in 1930 to more than 4,000,000.

During the period of rapid increase in school attendance we find that the amount spent for each pupil has steadily increased. Data

pertaining to increasing attendance in relation to rising costs are presented in the following table:

TABLE 2.—*Increasing attendance and school costs in the United States, 1870-1930*

Years	Millions of children in average attendance	Millions of dollars expended	Average annual expenditure per pupil
1	2	3	4
1870.....	4	63	\$15
1880.....	6	78	12
1890.....	8	140	17
1900.....	10	214	20
1910.....	12	426	33
1915.....	14	605	40
1920.....	16	1,036	64
1925.....	19	1,946	98
1930.....	21	2,289	109
Per cent of increase 1870 to 1930.....	425	3,533	560

¹ Estimated.

Table 2 shows that the average daily attendance increased approximately 400 per cent during the 60 years from 1870 to 1930, whereas expenditure increased more than 3,500 per cent. This makes an increase in the average annual expenditure per pupil of 560 per cent. This increase in cost, as already pointed out, is attributable in part only to costlier education. The variation in cost of living accounts for a large part of the increase during recent years. Computing the approximate increase in annual expenditure per pupil (see Table 1) between 1913 and 1929 by taking the amount at the halfway point (\$36.50) between the expenditure in 1910 and that in 1915 from the expenditure in 1929, determined similarly, we find it has been \$62. But \$62 in 1929 had a purchasing value, in terms of the 1913 dollar, of only \$36, which is the increase in average annual expenditure per pupil since 1913 due to costlier education. Although the increase in expenditure per pupil has been constant it was more in some periods than in others. The percentage of increase has been greatest during the last decade.

Placing secondary-school facilities within reach of all children of high-school age is a comparatively recent undertaking. Data concerning these schools indicate that their development has been a factor not only in increasing attendance and total school costs, but also in raising the per capita cost of education. During the 30 years from 1900 to 1930 the rate of increase of public high-school enrollment was approximately 10 times that of the total public-school enrollment. The estimated² cost per pupil enrolled in public high

² United States Bureau of Education, Bulletin, 1928, No. 12, p. 9.

schools in 1925-26 was \$185.74, as compared to \$63.31 per pupil in elementary schools.

Influence of longer term.—Longer terms of school are important factors in accounting for higher costs. In 1929-30 the average school was in session more than 8½ months; two months more than it was 50 years ago and a half month more than at the beginning of the decade. The results of efforts to extend the length of school terms in rural districts are beginning to be felt. Some States now require 9-month terms as a minimum for all schools. Many city school systems maintain 10-month terms, while some have even longer sessions. Legislation in 1929 raised the minimum school term in Illinois from 7 months to 8 months and in Maine from 30 weeks to 32 weeks, and in 1930 in Virginia from 140 days to 160 days.

Influence of building activity.—The period of inactivity in building during the World War left thousands of school communities with inadequate housing facilities well into the 1920's. Accordingly expenditure for school buildings and equipment advanced from approximately \$100,000,000 in 1915 to approximately \$430,000,000 in 1925. Since the latter date the amount expended has been somewhat less, but it is not far from \$16 annually per pupil at present, as compared to \$4 in 1910 and \$7 in 1920. Vastly better and more costly buildings are replacing those erected 30 or 40 years ago. Those who plan present-day school buildings are more concerned with beauty of design, adequate lighting and ventilation facilities, and the correct arrangement of rooms than in getting the largest building for the available funds. The value of school property per pupil enrolled in 1928 was \$218, as compared to \$111 in 1920.

Influence of salary increases.—Although teachers have never been paid on a par with others considering the demands made upon them, we find considerable progress has been made during recent years in their efforts to obtain better salaries. In 1900 the average salary for all public-school teachers in the United States was \$325, by 1910 it had advanced to \$485, and by 1915 to \$543. In 1920 the average annual salary of all teachers, including 6,583 supervisors and 13,638 principals, was \$871; in 1925, including 7,809 supervisors and 24,734 principals, it was \$1,252; and in 1928, including 6,629 supervisors and 25,848 principals, it was \$1,364. Assuming that the rate of increase for the first eight years of the decade has continued during the present biennium, the average in 1930, including supervisors and principals, was \$1,488. Some of the increase may be attributed to longer terms, but the major part no doubt is a consequence of raising teaching standards in particular and

of educational progress in general. Be this as it may, larger instructional costs are important factors in the increasing expenditures for education.

LEGISLATIVE PROVISIONS FOR MEETING SCHOOL COSTS

FEDERAL PARTICIPATION IN SCHOOL SUPPORT

There is little change from policies established prior to the present decade relative to the question of revenue for public education from national sources. But there has been rather constant effort put forth to induce the Federal Government to assume more responsibility in promoting public education than it now does. A number of proposals to create a Federal department of education with large annual grants of Federal revenue for the public schools have been before Congress. Recently, however, bills, such as the Curtis-Reed bill in the Seventy-first Congress, providing for the creation of a Federal department of education without money grants for public schools have been considered. The whole problem concerning the part which the Federal Government should take in public education is being carefully investigated at the present time by a committee appointed by the Secretary of the Interior.

Funds derived from Federal current income and paid to States to be used wholly or in part for public schools are the per cent grants, the forest-reserve county funds, the Smith-Hughes vocational education aid, and mineral royalty grants.

Grants from sale of land.—Per cent grants are made from funds derived from the sale of lands belonging to the United States in public land States. Beginning in 1802 with the admission of Ohio, a certain per cent of the proceeds of sales of these lands has been paid to the State in which the land is located. The grants are for purposes of education or of making public roads and improvements. The 29 States receiving such grants had been paid a total of \$17,020,749.76^a up to June 30, 1930; 25 States received approximately \$228,488 during the decade ended June 30, 1930; 28 States received \$30,451.60 during the fiscal year ended June 30, 1929, and an estimated amount of \$13,276.35 during the fiscal year 1930.

Grants from forest reserve income.—Congress provided in 1907 for the payment (to begin with the fiscal year 1906) of 10 per cent of all moneys, derived chiefly from timber and grazing rights, received annually by any forest reserve to the State or Territory containing said reserve, for the benefit of the public schools and public roads of the county or counties in which the forest reserve was situated.

^a Figures from the General Land Office including its estimated amount for the year 1930.

This law was amended May 23, 1908, increasing the grant to 25 per cent, at which it has remained to the present time. Thirty States and two Territories contain national forest reserves varying in size from approximately 24,000,000 acres in California to less than 10,000 acres in Louisiana. Incomes were obtained from those in 28 States and the two Territories in 1929 and 1930. The 25 per cent grants for schools and roads varied all the way from \$62.48 in Porto Rico in 1929 to \$406,877.02 in California in 1930. The total in 1929 was \$1,605,882.65 and in 1930 \$1,718,875.33. In 1920 the grants totalled \$1,180,065 and in 1921 \$1,023,082.

An act of Congress of June 10, 1910, provided for the payment of a part of the gross income of any forest reserve containing school land belonging to a State or Territory in which said forest reserve is situated. The amount granted to a State or Territory under this act bears the same ratio to the entire income of such forest reserve in said State or Territory that the area of the school sections in the reserve bears to the area of the entire forest reserve. Two States, Arizona and New Mexico, received funds under this provision during the biennium.

Funds from Smith-Hughes and similar subsequent acts.—With the enactment of the well-known Federal Vocational Education Law of February 23, 1917, Congress made definite provision through the use of national funds for promoting one phase of public-school education. Beginning with the fiscal year 1918, when \$1,700,000 was made available under the provision of this law, the annual appropriations had increased by 1926 to \$7,200,000, at which figure they continued until and including 1929. By the provisions of an amendment of February 5, 1929, the appropriations for instruction in certain vocational subjects are to increase by a half million dollars and those for administrative purposes by \$100,000 a year from 1930 to 1934 inclusive. The vocational rehabilitation act of June 2, 1920, with subsequent amendments and extensions, provides for the annual appropriation of \$1,075,000 from the Federal Treasury for the instruction and guidance of persons disabled in industry or otherwise into some useful employment. It is interesting to note in passing that enrollment in the vocational courses benefiting by these national subsidies increased from approximately 260,000 in 1920 to approximately 1,000,000 in 1930.

Funds from mineral leases.—Thirteen States received funds during the decade derived from Federal mineral leases. The law under which these leases are made became effective at the beginning of the decade. It provides for leasing land on the public domain for coal, phosphate, oil, oil shale, gas, and sodium mining. Thirty-seven and

one-half per cent of the receipts from bonuses, royalties, and rentals for production since the act became effective is paid to the State within whose boundaries the leased lands or deposits are located. These moneys are granted to the State for the construction and maintenance of public roads or for the support of public schools or other public educational institutions as the legislature of the State may direct.

The amounts paid from this source during the decade are shown in Table 3.

TABLE 3.—*Payments to States from receipts under the leasing act of February 25, 1920, from the passage of the act to June 30, 1930*¹

State	Subtotal, 1921-1926	1927	1928	1929	1930	Total
1	2	3	4	5	6	7
Alabama.....	\$32,737.50	\$586.76	\$1,138.64	\$3,206.75	\$5,437.31	\$43,206.86
California.....	2,811,987.97	445,601.48	521,319.18	241,031.71	378,454.88	4,398,395.22
Colorado.....	80,592.37	40,867.46	34,918.75	36,816.11	36,686.31	229,881.00
Idaho.....	510.44	736.19	930.90	1,128.39	1,069.06	4,369.98
Louisiana.....	1,856.31	5,330.94	1,461.61	4,544.40	1,457.33	14,650.59
Montana.....	454,895.64	70,832.76	44,651.39	42,445.49	40,530.97	653,356.25
Nevada.....	831.43	540.00	548.64	273.75	311.25	2,505.07
New Mexico.....	10,791.41	5,771.91	9,688.23	16,977.45	44,616.02	87,845.02
North Dakota.....	12,810.73	2,904.18	12,277.55	11,404.23	8,887.93	48,284.62
South Dakota.....	203.30	7.06	15.00	15.00	48.66	289.04
Utah.....	62,060.67	12,905.95	21,705.62	33,332.48	30,563.14	160,567.96
Washington.....	7,223.96	939.11	1,491.32	169.33	574.28	10,398.00
Wyoming.....	14,705,025.97	1,911,665.78	1,102,534.13	996,590.99	1,227,925.89	19,943,742.76
Total.....	18,181,527.90	2,498,689.58	1,732,680.76	1,388,031.08	1,776,563.05	25,597,492.37

¹ Column 2 includes 20 per cent of receipts from production previous to enactment of law February 25, 1920. Data compiled by United States General Land Office.

It will be seen in the above table that, with two or three exceptions, the money paid to the 13 participating States under the mineral-leasing act has been of minor importance as a source of State income. It is apparent, however, that valuable production under the act in a public-land State would be a significant source of revenue to that State. This is true in Wyoming where these funds amounted in 1928 to more than 11 per cent of the total State revenue receipts and to 18 per cent of the total expenditure for public schools that year. Of the four States receiving the largest amounts under this act, California uses her entire quota (except there be a surplus) for the maintenance of junior colleges; Colorado uses two-thirds of her quota for public roads and one-third for the State school of mines; Montana places hers into a State common school equalization fund; and Wyoming uses 50 per cent of her royalties (up to \$4,000,000) for salaries of public-school teachers and school bus drivers, 41 per cent for public roads, and 9 per cent for State university purposes.

In a number of other appropriations the Federal Government aided public schools directly or indirectly during the biennium. Among these are tuition paid for Indian children in the public schools of some States, appropriations for the schools for natives of Alaska, an amount fixed yearly by Congress for the public schools of the District of Columbia, and appropriations for extension work in agriculture and home economics under the Smith-Lever Act of 1914. The biennium has witnessed no departure of consequence from procedures followed previous to 1928 in the granting of these funds.

STATE PARTICIPATION IN SCHOOL SUPPORT

Remarkable interest has been manifested throughout the decade in the question of State support for public schools. Although no new plans have developed many changes in those previously existing have taken place. Among the most important activities in this connection are the efforts put forth in all sections of the country to find new sources of State school revenue and the attempts in one State after another to equalize the burden of school support.

Attention has already been called to the constantly widening and rising educational standards and the resultant higher costs of the educational program. Since the State itself is responsible for the advancing standards, such as longer terms, more years of compulsory attendance, and higher qualifications for teachers, it is fair to assume provision has been made to meet the additional costs from State sources. However, this has not generally been the case, as can be seen in Table 4.

TABLE 4.—Per cent of school revenue derived from the State in 1927-28 as compared to that in 1917-18

States	1927-28		1917-18	
	Rank of State	Per cent of revenue from State	Rank of State	Per cent of revenue from State
1	2	3	4	5
Delaware.....	1	83.4	15	25.1
Alabama.....	2	40.7	1	63.1
Texas.....	3	35.7	7	40.7
Utah.....	4	35.1	8½	35.3
Wyoming.....	5	32.7	14	25.3
Arkansas.....	6	32.3	13	27.7
Mississippi.....	7	31.9	3	48.9
Washington.....	8	30.4	20	21.7
Maine.....	9	30.1	6	44.2
New Mexico.....	10	29.8	23	30.2
Georgia.....	11	29.3	2	49.8
Kentucky.....	12	27.0	4	46.0
Louisiana.....	13	26.9	16	23.7
New York.....	14	26.8	37	9.3
Virginia.....	15	26.6	11	30.1

TABLE 4.—Per cent of school revenue derived from the State in 1927-28 as compared to that in 1917-18—Continued

States	1927-28		1917-18	
	Rank of State	Per cent of revenue from State	Rank of State	Per cent of revenue from State
1	2	3	4	5
Tennessee.....	16	24.8	24	19.1
South Carolina.....	17	23.7	33	12.3
Nevada.....	18	21.6	8½	35.3
Minnesota.....	19	20.2	12	28.2
Arizona.....	20	20.1	22	20.6
New Jersey.....	21	20.0	5	45.1
California.....	22	19.5	18	22.2
Maryland.....	23	18.2	10	31.3
Pennsylvania.....	24	16.9	36	9.4
Michigan.....	25	16.2	19	22.1
Rhode Island.....	26	15.3	44½	5.2
Vermont.....	27	14.0	21	21.2
Oregon.....	28	13.4	44½	5.2
Montana.....	29	12.5	32	12.7
North Carolina.....	30	11.2	30	13.6
Massachusetts.....	31	10.3	46	3.5
Wisconsin.....	32	10.2	25	17.7
Missouri.....	33	10.1	34	12.0
New Hampshire.....	34½	10.0	43	5.9
North Dakota.....	34½	10.0	28	14.9
South Dakota.....	36	9.3	27	16.4
Florida.....	37	9.0	17	22.7
Indiana.....	38	7.8	26	17.0
West Virginia.....	39	7.7	38	8.9
Idaho.....	40	7.4	31	12.8
Oklahoma.....	41	7.1	29	14.3
Illinois.....	42	5.9	41	7.5
Nebraska.....	43	5.8	39	8.2
Ohio.....	44	4.9	40	8.0
Iowa.....	45	4.3	48	2.0
Colorado.....	46	3.2	42	6.8
Connecticut.....	47	2.8	35	9.9
Kansas.....	48	1.8	47	2.6

Summary of Table 4

Number of States		Per cent of money derived from State
1927-28	1917-18	
1	2	3
1	1	More than 50
1	6	40-49.9
7	4	30-39.9
12	12	20-29.9
14	11	10-19.9
13	14	0-9.9

Failure on the part of law makers to make adequate provision to meet the mounting costs of the educational program results in throwing a constantly heavier burden on local school taxing units. Public schools of 7 States received 40 per cent or more of their revenue in 1917-18 from State sources, whereas this was true in only 2 States in 1927-28; those of 11 States received 30 per cent or more in 1917-18, but the schools in only 9 States received as much in 1927-28; those of 23 States received 20 per cent or more in 1917-18 and of 21 States in 1927-28; those of 34 States received 10 per cent or more in 1917-18 and of 35 States in 1927-28. Some State funds were provided for the public schools in all States both years. The median per cent in 1917-18 fell between 19.1 and 17.7, while in 1927-28 it fell between 16.9 and 16.2.

Available reports for 1929 and 1930 indicate that for these years an arrangement, similar to that presented in Table 4, would show considerable shifting in the positions of States from the position they occupied in 1927-28. The general trend downward in percentage of total public-school expenditure derived from State sources continued during the biennium 1928-1930 in most States, but in a few the percentage increased.

Types of State taxes.—That the general property tax has been overworked as a source of revenue is an accepted truism to-day. Since localities depend chiefly on this type of tax for their revenue and since, as has been pointed out, localities have borne the brunt of the burden of increased school costs, there is an imperative need for States in their process of raising revenue to tax other forms of wealth if localities are to be relieved. Accordingly, much study concerning new sources of wealth and new types of taxes is in evidence. Financial surveys and investigations by legislative and other important committees have been made during the decade in practically all States with the view of bringing about improvement in taxing systems. Such investigations were under way in more than one-half the States during the biennium 1928-1930. Reports and recommendations of most of these were placed in the hands of the 1931 legislatures.

Recent changes in revenue laws reflect the wide-spread interest in the tax-reform movement. Data showing the relative importance of the proceeds of the different types of State taxes during the decade indicate a trend toward newer types of taxes.

TABLE 5.—Per cent of State revenue receipts received from various sources¹

States	General property tax		Business license ²		Motor vehicle license tax		Motor fuel tax		Earnings of general departments	
	1919	1928	1919	1927	1919	1928	1919	1928	1919	1928
1	2	3	4	5	6	7	8	9	10	11
Alabama.....	49.6	25.8	7.8	11.4	2.0	9.4		10.8	29.9	13.2
Arizona.....	70.1	62.6	1.9	2.7	3.8	5.0		10.4	8.9	4.1
Arkansas.....	63.6	23.1	5.3	8.1	6.7	17.0		20.4	11.1	5.6
California.....	63.03		39.6	21.6	7.9	5.6		15.0	9.4	6.4
Colorado.....	55.6	31.7	4.8	4.6	2.5	5.2		21.8	12.7	11.2
Connecticut.....	13.3	6.6	17.8	24.9	7.5	20.1		9.1	8.6	7.7
Delaware.....		4.4	29.0	4.2	12.5	10.1		8.3	4.2	6.2
Florida.....	63.2	20.6	11.6	7.0	7.7	14.2		34.6	9.5	7.6
Georgia.....	54.4	23.6	7.2	8.7	4.0	13.8		21.9	11.8	5.8
Idaho.....	32.1	28.6	5.0	3.6	4.9	1.9		20.5	19.3	6.3
Illinois.....	66.5	32.2	11.7	19.5	8.0	18.8		7.8	4.8	4.1
Indiana.....	53.1	26.7	5.9	7.2	8.5	9.3		24.4	15.0	10.3
Iowa.....	44.9	24.6	6.0	6.8	2.1	24.1		11.2	18.8	13.7
Kansas.....	51.0	30.6	7.8	4.2	1.3	14.2		18.2	20.1	12.0
Kentucky.....	51.0	30.6	16.4	8.0	4.5	13.6		17.8	10.4	7.1
Louisiana.....	53.7	33.1	18.9	15.8		15.2		11.6	18.5	4.8
Maine.....	41.9	26.3	21.4	15.9	7.5	14.5		13.7	12.7	7.8
Maryland.....	35.5	22.3	25.5	21.2	7.7	7.4		16.5	15.4	14.7
Massachusetts.....	27.9	14.3	16.0	5.9	5.4	21.4			9.1	7.0
Michigan.....	55.5	40.2	4.5	4.8	11.4	13.0		14.6	17.3	7.8
Minnesota.....	24.6	19.2	26.3	25.1	3.6	16.9		8.9	22.7	9.0
Mississippi.....	46.5	24.3	16.9	12.4	0.2	2.2		14.1	23.8	10.9
Missouri.....	18.0	14.2	16.8	6.8	7.4	19.1		14.7	40.2	15.9
Montana.....	28.1	18.0	20.3	17.2	4.6			15.7	6.0	5.9
Nebraska.....	60.6	45.7	3.8	3.4	0.9	5.5		16.8	16.0	9.1
Nevada.....	65.9	33.9	8.3	1.0	1.8	6.3		6.8	4.6	5.8
New Hampshire.....	51.5	33.0	5.7	5.5	16.1	19.8		16.8	8.5	8.6
New Jersey.....	58.7	42.0	7.7	2.9	6.7	14.7		7.2	5.7	5.0
New Mexico.....	50.2	30.4	4.3	1.8	1.8	4.9		19.7	12.8	11.6
New York.....	17.6	10.3	31.5	21.7	2.9	9.8			5.3	3.2
North Carolina.....	40.5		13.0	11.0	6.5	18.9		22.4	18.5	9.9
North Dakota.....	29.9	21.4	5.3	3.3	7.0	5.9		7.4		9.7
Ohio.....	15.8	14.4	35.7	25.5	9.7	8.0		20.5		8.6
Oklahoma.....	28.1	10.9	21.9	28.9	0.7	7.0		16.1	10.4	7.5
Oregon.....	58.5	22.0	5.5	5.0	9.0	28.5		16.3	10.7	8.0
Pennsylvania.....			19.4	12.3	8.5	17.4		10.6	9.8	6.7
Rhode Island.....	18.8	14.0	15.4	11.8	8.1	18.5		9.9	6.4	5.0
South Carolina.....	63.9	10.8	5.0	18.3	1.3	16.0		16.7	21.1	7.6
South Dakota.....	42.7	25.7	4.0	4.5	0.6	8.5		16.2	16.8	8.2
Tennessee.....	38.3	10.8	12.3	14.6	5.4	13.8		15.5	25.1	7.9
Texas.....	58.3	27.3	8.1	13.7	6.9	13.9		20.6		4.8
Utah.....	53.3	41.3	4.9	3.5	3.7	5.8		13.4		8.5
Vermont.....	39.6	14.7	6.4	5.2	11.5	25.1		12.0	6.8	5.1
Virginia.....	31.0	15.2	26.9	16.4	5.1	13.3		13.8	9.1	11.5
Washington.....	62.2	45.3	6.4	5.5	6.6	19.5		10.9	6.1	6.0
West Virginia.....	21.1	12.9	18.4	23.1	11.9	17.7		17.8	13.7	8.7
Wisconsin.....	52.4	21.0	5.9	5.8	9.3	23.2		13.7	13.3	10.3
Wyoming.....	44.3	13.2	2.9	1.4	.6	6.7		9.5	11.2	6.8
United States.....	30.2	25.1	10.8	14.4	10.2	13.6		12.5	12.3	7.4

¹ Source of data, United States Bureau of the Census.² Data for 1928 not available; does not include motor fuel tax.

TABLE 5.—Per cent of State revenue receipts received from various sources—Con.

States	Inheritance tax		Special property tax ¹		Income tax		Earnings of public service enterprises ²		All other revenue	
	1919 ³	1928	1919	1928	1919	1928	1919	1928	1919	1928 ⁴
1	12	13	14	15	16	17	18	19	20	21
Alabama.....			2.6	4.6				1.8	7.1	23.0
Arizona.....	0.4	4.1							14.9	11.1
Arkansas.....	2.7	1.1	5.4	2.3				1.4	5.2	21.0
California.....	10.3	10.6	15.1	8.5			6.7	3.1	11.0	29.2
Colorado.....	4.3	4.6	2.8						17.3	20.9
Connecticut.....	9.6	8.8	18.3	10.5	16.4		1.0	.01	7.5	12.3
Delaware.....	3.0	6.9	12.7	19.0	21.3	17.2			17.3	23.7
Florida.....			.7	.2					7.3	15.8
Georgia.....	2.3	2.1	1.8					.05	18.5	24.1
Idaho.....	.7	.3	2.4						35.6	38.8
Illinois.....	4.8	11.3					.09	.04	4.2	6.3
Indiana.....	3.6	2.6	1.2	.2					12.7	19.3
Iowa.....	3.7	2.9							24.5	15.7
Kansas.....	2.9	2.6	3.5				1.9	1.5	11.6	16.7
Kentucky.....	7.6	2.1	2.1	1.2					8.0	19.6
Louisiana.....	1.2	2.4					.6	.2	7.1	16.9
Maine.....	3.5	9.1	7.5	5.1				1.2	5.5	14.2
Maryland.....	3.1	3.0	3.8	2.6			.5	1.6	8.5	10.7
Massachusetts.....	14.9	17.4	13.3	13.3		1.0	.7	.7	12.7	19.0
Michigan.....	1.8	2.5	1.3	7.6				.3	8.2	9.2
Minnesota.....	2.3	2.1	.2	.02					20.3	18.8
Mississippi.....	.03	.9	2.6	.9	1.1	8.2			8.7	16.1
Missouri.....	4.8	6.7	6.6	4.2	1.1	8.2			5.4	10.2
Montana.....	.9	5.8							40.1	37.4
Nebraska.....			1.7						17.0	18.5
Nevada.....	.01		.1	.08					19.3	46.2
New Hampshire.....	6.9	4.6	.4	.7					10.9	11.0
New Jersey.....	13.4	12.6	2.0	4.1				2.4	5.8	9.1
New Mexico.....		2.7		.3					30.9	28.6
New York.....	16.2	14.8	10.2	4.6		13.0			16.3	22.6
North Carolina.....	6.1	1.6	1.9	2.0	1.7	18.9		.1	11.9	15.4
North Dakota.....	1.3	1.5				2.4	.05	22.3	35.0	26.1
Ohio.....	1.4	3.3	16.1	8.8			.9	.3	8.7	10.6
Oklahoma.....	.1	.9	1.5	1.4	4.1	3.2			33.2	24.1
Oregon.....	1.3	2.5	3.4			.004	.1	.01	16.5	17.1
Pennsylvania.....	11.9	11.6	45.9	27.7				.4	4.5	13.3
Rhode Island.....	6.3	5.2	36.1	23.1			1.8	.2	7.1	12.3
South Carolina.....		.7	2.0	2.0	.6	1.3			6.1	17.1
South Dakota.....	1.7	1.2	.3					4.1	33.9	31.6
Tennessee.....	3.5	1.4	4.3	1.5					11.1	34.5
Texas.....	.5	1.1	2.0	2.1			.1		11.9	16.4
Utah.....	5.0	2.8	1.8						24.7	24.7
Vermont.....	2.6	4.4	24.1	16.9					9.0	16.6
Virginia.....	1.3	1.6	3.1		5.8	9.5			17.1	18.7
Washington.....	1.3	1.8							17.4	11.0
West Virginia.....	5.3	2.7	15.3						14.3	17.8
Wisconsin.....	3.7	7.4	.6		3.4	2.9			11.4	15.7
Wyoming.....		1.2							41.0	62.2
United States.....	5.8	6.5	8.6	5.4	.7	2.9	.4	.7	21.0	11.5

¹ Special property tax includes tax on corporation, bank, and insurance companies.² Revenue derived from toll bridges, State printing plants, etc.³ Estimated.

Table 5 shows the relative importance of the various sources of "State" revenue for 1919 and for 1928. The percentages relate to revenue received by State governments and in most cases used by them in carrying on their various activities. Data showing receipts from business licenses for 1928 were not available when the compilations were made; those given are for 1927. Consequently the percentages shown in column 21, all other revenue for 1928, are estimates. The items of the table are listed according to their importance in contributing to the State funds for the country as a whole in 1928.

The importance of the general property tax as a source of State revenue is decreasing. With the exception of California, Delaware, and Pennsylvania, in which no general property tax was levied in 1919, every State shows a decrease in percentage of revenue from this source. Three States in 1928, California, North Carolina, and Pennsylvania, did not use the general property tax, although the Bureau of the Census reports a small sum from the proceeds of tax-deeded lands in California. Thirty per cent of the total revenue for State purposes in all States was derived in 1919 from this tax as compared to 25 per cent in 1928. Only one State derived as much as 60 per cent of its revenue from the general property tax in 1928, whereas this was true in eight States in 1919. The median percentage for the 48 States in 1919 fell between 46.5 and 44.9, in 1928 between 23.1 and 22.3. The percentages for the middle 24 States in 1919 varied from 54.4 to 28.1, in 1928 from 30.6 to 14.2. Ten States derived less than an eighth of their revenue from the general property tax in 1928 as compared to three States in 1919.

Special property taxes, chiefly on stock transfer, incorporation, and the like, have decreased in importance with the general property taxes, but other types of taxation have increased in importance. The extent to which the several States depend on the different sources of revenue varies greatly. For all States, business licenses or taxes in 1927, not including the motor-fuel tax, produced 14 per cent of the governmental revenue as compared to less than 11 per cent in 1919. Two comparatively new, but mutual sources of State revenue, the motor-license and motor-fuel taxes, are rapidly assuming a place of major importance. Combined, they yielded in 1928, 26 per cent of the total—more than that produced by the general-property tax. Only one of these was utilized in 1919. All States now have the motor-fuel tax and all but one report motor-license revenue. Forty-four States derived revenue from the inheritance tax in 1928 varying from less than 1 per cent of the total to more than 17 per cent. For all States there was an increase of approximately 1 per cent from this source. Twelve States reported receipts from the income tax in 1928 as compared to nine States in 1919.

The earnings of general departments of State governments (revenue from fees, charges for services rendered, etc.) produced a smaller percentage of the total revenue for all States in 1928 than they did in 1919. The median percentage for the 48 States in the latter year was $7\frac{3}{4}$ as compared to 12 per cent in the former. Public-service enterprises (wharf, dock, and cement-plant earnings and the like), although not of great importance in most States, produced nearly a fourth of the revenue in North Dakota in 1928. Column 21 shows that sources of revenue other than those listed are not so important in 1928 for all States as they were in 1919, but that for some they were more important. Since subventions, donations, and grants from the Federal Government are included here, there is bound to be a wide variation in the percentages among the different States.

New sources of revenue for education.—Certain of the taxes mentioned in the preceding section, due to their present actual and future potential importance as sources of school revenue, deserve special treatment in a study of this kind. Among these are the income, the inheritance, the sales, and the severance taxes.

The income tax.—The State income tax has become within the past 20 years an important source of revenue for nearly half the States. During the decade just closed five States have enacted new income tax laws and a number of others have materially improved existing ones. Proceeds of State income taxes contribute directly or indirectly to State school support wherever such laws are in force. In most cases the proceeds go into the general State fund from which the various appropriations are made, but the schools in at least four States have a definite claim on the proceeds of income taxes.

In 1929 the Arkansas Legislature enacted an income tax law providing that \$750,000 of its annual proceeds shall be paid into the public-school equalization fund. Delaware in 1921 amended the income tax law providing for the payment of the entire proceeds into the State current school fund. The proceeds of the Delaware tax amounted to \$2,188,919.73 for the school year 1928-29. The Massachusetts law provides, since 1919, for the use of funds from the proceeds of the income tax sufficient to meet claims of schools in accordance with the State aid law. In 1929 Massachusetts paid the school corporations of the State \$5,298,777.71 from the proceeds of this tax.

From the time the income tax law was enacted (1911) in Wisconsin until 1926, the State government retained only 10 per cent of the proceeds of the tax, and this was intended to cover the cost of administration. The remainder was returned to local and county governments. An amendment in 1926 increases the State's share to 40 per cent of the proceeds, all of which after deducting the cost of administration is used for educational purposes. (Under certain

conditions a portion of a local unit's share of the proceeds from the tax reverts to the county government for distribution to the schools.) The State received \$6,288,669 as its share from this tax in 1929. Wisconsin also levies a surtax on incomes above \$3,000 for the benefit of the teachers' retirement fund. This tax yielded \$1,730,125 in 1929.

Other States enacting income tax laws during the decade, or strengthening those already in effect, for the purpose of obtaining additional revenue for schools include Georgia, Mississippi, Missouri, and North Carolina. Georgia provided for a tax on incomes for the first time in 1929. It has been estimated by those who sponsored the bill that this tax will yield \$4,000,000 annually. The Georgia law has been tested in the State supreme court where it was declared constitutional. Increasing the rates of taxation and otherwise changing the laws in each of the other three States have resulted in greater revenue for educational purposes from this type of tax.

The inheritance tax.—The State inheritance tax is of more importance as a source of revenue than the income tax. In 1928, all but three States (Alabama, Florida, and Nevada) levied a tax on inherited estates, the proceeds of which yielded 2.5 per cent of the total State revenue as compared to 5.8 per cent of the total in 1919. Regarding the three States not levying an inheritance tax, it is interesting to note that the constitution of Alabama of 1901 and an amendment adopted in 1930 to the Florida constitution authorize such a tax and Nevada previously levied one.⁴

The inheritance tax contributes in most instances, like many other State taxes, to the general expenses of government. The schools share in the proceeds indirectly. However, the laws of three States give the schools a direct claim on the proceeds. Kentucky, previous to 1924, used the inheritance tax for raising revenue for the State's general fund. Legislation that year provided for the use of 50 per cent of the annual proceeds for the support of the State's five institutions of higher learning; another change in the law in 1926 provides that the entire proceeds shall be used for this purpose. The proceeds exceeded \$1,000,000 for the fiscal year ended June 30, 1929. Michigan has for years applied the proceeds of her inheritance tax to a fund which is used chiefly in making annual interest payments on the State's debt to the primary school fund. The proceeds amounted to over \$3,000,000 for the fiscal year ended June 30, 1929. Previous to 1923 Montana applied the proceeds of her inheritance tax to the State's general fund. A change in the law that year⁵

⁴Total for 43 States since in Nebraska the entire proceeds of taxes on inheritances remain in counties where collected for the respective county road funds.

⁵The Nevada law was in force from 1918 to 1925, when it was repealed. Forty per cent of the proceeds was applied to the State current school fund.

provides for the use of 50 per cent of the proceeds for the benefit of the public schools. The entire proceeds of the tax in Montana in 1928 amounted to \$661,812.

Recent legislation in at least two States diverts the proceeds of the inheritance tax from educational funds to State general funds. Previous to 1925 California applied \$250,000 of the proceeds of her inheritance tax to the current elementary school fund. Since that year, all except 5 per cent of the proceeds, which goes to the teachers' permanent retirement fund, goes into the general fund. The proceeds of the Virginia inheritance tax in accordance with the 1928 tax code go into the State's general fund. Previously, two-thirds of the proceeds were placed directly into educational funds of the State.

The sales tax.—Taxes are levied on the manufacture, the sale, or the transfer of particular commodities or properties in all States. With the possible exception of West Virginia, however, the general sales tax is not common in the United States. The one commodity subject to the sales tax in all States is motor fuel. Other commodities most frequently subject to this tax are amusement tickets, malt, and tobacco.

The gas tax has suddenly become an important source of State revenue. Although the first motor-fuel tax law was enacted scarcely more than 10 years ago; 46 States levied such a tax in 1928 which produced one-eighth of the total State revenue for all States that year. (See Table 5.) During the last biennium the two remaining States levied a tax on gasoline and the rates in many others were advanced. The average tax rate on gasoline in 1925 was 2.3 cents per gallon in 44 States; in 1930 it was 3.8 cents in 48 States.* The motor-fuel tax is levied primarily for the benefit of roads, but a few States provide for the use of a part of the proceeds for educational purposes.

Florida, in 1927, in order to provide additional revenue for educational purposes, increased the tax on gasoline 1 cent a gallon, effective for the period July 1, 1927, to July 1, 1929. In 1929 the legislature levied gasoline taxes aggregating $1\frac{2}{3}$ cents per gallon for educational purposes. The proceeds, except \$400,000 set aside annually for a permanent building fund for institutions of higher learning, are credited to the public-school fund. The proceeds from this source apportioned to the public schools from July 1, 1929, to May, 1930, amounted to \$2,631,845.

The 1927 Georgia Legislature provided for an equalization fund to be derived from the proceeds of a $\frac{1}{2}$ -cent gasoline and a 1-cent kerosene tax. The law was amended in 1929 by apportioning to

* State government. August, 1930. P. 8.

this fund the proceeds from an additional half-cent gasoline sales tax. In 1930, \$2,407,804 was paid to the schools from the proceeds of these two taxes.

An amendment to the Louisiana constitution passed by the legislature in September, 1930, and approved by the voters in November, provided that an additional tax of 1 cent per gallon shall be levied on gasoline and that one-half of the proceeds shall be known as the State equalization fund for schools. It is estimated that the revenue for the schools from this new source will approximate \$1,000,000 annually.

Texas levied a 1-cent tax on gasoline in 1923 as a part of the "gross receipts or occupation tax bill" (one-fourth of the revenue from this source goes to the "available free school fund"). The 1927 legislature increased the rate to 3 cents per gallon. At this rate the tax yielded \$14,829,489.89 during the fiscal year September 1, 1928, to August 31, 1929, or 16½ per cent of the State's income. The rate was increased to 4 cents per gallon in 1929, and it is estimated that the proceeds will be \$30,000,000, of which \$7,500,000 will go to the school fund mentioned above.

License fees on certain articles or amusements, frequently designated "luxuries," have increased in importance as sources of State revenue throughout the country during recent years. Such revenue contributes in most cases to the general State fund, but the laws of a few States allocate the proceeds to educational funds. For example, Florida in 1927 provided for the levying of a State tax on every person, firm, or corporation engaged in the automobile tire and tube business and for crediting all money derived therefrom to the State school fund. Louisiana in 1928 provided for a tax of 10 cents per pound on malt, the proceeds of which are used by the State board of education "to alleviate conditions where reasonable taxation will not support adequate means of education." The rate was reduced to 3 cents per pound in 1930.

A number of States levy a sales tax on tobacco products and devote the proceeds to the public schools. The Alabama Legislature of 1927 provided for a tax of 15 per cent on the wholesale price of cigars, cigarettes, cheroots, or any substitute thereof, as one source of revenue for the public schools. This tax produced \$1,278,689.98 during the fiscal year ended September 30, 1930. Arkansas has levied a tobacco tax throughout the decade. At present each wholesaler pays to the State an annual license of \$25 and each retailer pays from \$5 to \$20 for each place of business. Of the proceeds, the first \$750,000 is credited to the common-school fund, the next \$750,000 to the State equalization fund, and the remainder is divided equally between these two funds. Tennessee uses the annual proceeds of her State tax of 10 per cent on the retail selling price of cigars,

cigarettes, tobacco products, and snuff (according to the 1929 law) as follows: (1) \$800,000 to guarantee an 8-month term in the rural elementary schools; (2) \$200,000 for the State high-school fund; (3) \$82,500 for a sinking fund for the retirement of the State's "rural school building and repair bonds" authorized in 1927, \$225,000 for a sinking fund for the retirement of the State's university building bonds authorized in 1927, and the remainder is applied to the general State current school fund.

The severance tax.—Another State tax which has come into prominence during the decade is that levied on natural products of mines, quarries, forests, and rivers. It is proving to be a significant factor in the production of revenue where it is used. A number of States "levy a tax of this type wholly or partially for educational purposes.

Legislation enacted in Alabama in 1927 provides for a production tax of 2½ cents per ton on coal, 4½ cents per ton on iron ore, and a tax of 3 per cent on the net value at place of production of all other minerals enumerated in the law. The proceeds are allotted to the State "educational trust fund." For the fiscal year 1928-29 taxes on these products amounted to \$752,923.45.

A severance tax, chiefly for the benefit of schools, has been levied in Arkansas since 1923. The present rate is 2½ per cent of the gross market value of all products subject to the tax, excepting coal, which is taxed at 1 cent per ton, timber at 7 cents per thousand board feet, and manganese ore at 10 cents per ton. (In addition to these rates, levies on minerals, excepting coal, are provided for the benefit of the State geological fund.) The proceeds of the tax at rates indicated are allotted two-thirds to the State common school fund and one-third to the counties in which the revenue is produced. The portion returned to the counties is divided equally between the road and the school funds of the respective counties. The tax produces more than a million dollars annually.

Kentucky levies a tax of 1 per cent of the market value of all crude petroleum produced. This tax is for general State purposes, but any county may impose a like tax not to exceed one-half of 1 per cent, for roads, schools, or county purposes. The law has been in force throughout the decade. The State tax produced \$101,238.93 for the fiscal year ended June 30, 1928.

Louisiana has levied a tax on products "severed from the soil or water" for more than a decade. Previously to 1922 it was 2 per cent on the gross value at place of production of and the proceeds were all placed in a severance fund. Since 1922 which specific appropriations have been made for educational purposes.

1 per cent on oil and gas but left at 2 per cent on other products. In 1928 the tax rates were completely revised by fixing a schedule for each product based on a stipulated amount per unit of measure rather than a per cent of the gross value.

Under the 1922 law two-thirds of all proceeds were allocated to the State "severance tax fund." The 1928 law places all severance taxes collected in this fund except one-fifth of the collection on oil, gas, salt, shells, timber, sand, and gravel. This State fund, which has varied in annual amount during the decade from \$2,000,000 to less than \$1,000,000, was appropriated from 1922 to 1926 chiefly for the use of the State university and the Louisiana Polytechnic Institute; from 1926 to 1928 chiefly for all State educational institutions; since the year 1927-28 none of these institutions have received appropriations from this fund, but \$750,000 has been appropriated annually for the purchase of free textbooks.

The 1922 law allocated one-third of the proceeds, not to exceed \$200,000 annually to any one parish, from the tax on oil and gas to the parishes wherein such tax had been collected. An amendment in 1926 added one-third of the taxes collected on salt to this allocation. By provision of the 1928 law, one-fifth of all collections on oil, gas, salt, shells, timber, sand, and gravel is returned to the parishes wherein collected; provided that not more than \$200,000 shall be returned to any one parish in a year. These funds are distributed among parish schools and such district governing authorities as have jurisdiction over the territory from within which the revenue is produced.

Since 1916, one-third of the proceeds of Oklahoma's gross production tax on certain specified minerals, crude oil, and natural gas has been returned to the counties wherein the tax is produced; two-thirds are credited to the general State fund for current expenses. The amount returned to any county is divided equally between the common-school fund and the road and bridge fund of such county. Legislation in 1927 provides that 25 per cent of the part (two-thirds) retained by the State, not to exceed \$1,500,000 in any fiscal year, shall be credited to the "special common school equalization fund."

Pennsylvania in 1915 provided for a production tax on anthracite coal equal to $2\frac{1}{2}$ per cent of its value at the mines; in 1921 the rate was lowered to $1\frac{1}{2}$ per cent. Fifty per cent of the proceeds were credited to the State highway fund and 50 per cent returned to the counties wherein the taxes were produced for the use of cities, boroughs, and townships. Legislation in 1929 provides for the discontinuance of this tax after May 31, 1931. The 1923 legislature provided for crediting to the State school fund all income from forests, water powers, and other rights belonging to the State.

A "gross occupation" tax of 2 per cent has been levied in Texas since 1923 on the production of natural oil and sulphur. Since one-fourth of the proceeds of the occupation tax is allocated to the current State common-school fund, the oil and sulphur tax, which is essentially a severance tax, contributes directly to education. During the fiscal year ended September 30, 1928, the tax on these two products produced \$5,062,583.98.

The provisions, mentioned above, for raising revenue for the schools do not exhaust the list of "new" sources of State school revenue, but they are among the most important ones of recent years. Since they are recent enactments, they indicate a developing tendency on the part of lawmakers to avoid the general property tax when additional State school funds are needed.

Other new sources of State school revenue.—A number of other new sources of revenue, such as the tax on hydroelectric power companies and on railroad, express, and telegraph lines provided in Alabama as a part of the 1927 educational program, the tax provided by the Louisiana Legislature of 1928 on the production of carbon black from natural gas, and the license tax provided by the 1927 Florida Legislature on dealers in automobile tires are proving effective in the production of State school revenue and as substitutes for the general property tax. On the other hand, provision has been made in a few instances for increasing the general property tax for the purpose of providing additional State school revenue. For example, Maryland provided in 1922 for a State school tax of 1½ mills on the taxable property throughout the State, and the Florida Legislature in 1929 provided, in addition to the required constitutional 1-mill levy already in force, for an annual school tax of one-fourth of a mill on the property of the State.

Various State licenses and miscellaneous items are gaining in importance as sources of State revenue, as shown by Table 5; many of these contribute to educational funds. However, notwithstanding the attempts to employ new sources of State revenue, as has been pointed out, the proportion of school costs borne by the State continues to decrease and the increasing proportion borne by localities continues to come in large measure by raising tax rates on tangible property.

Source of State school revenue.—Local school revenue, as has been pointed out, is derived chiefly from a special tax for education, but State school revenue is derived in large part from legislative appropriation from the general State fund. All the proceeds from State taxes levied especially for education, for the country as a whole, amounted to less than one-fourth of the total State school revenue in 1927-28. This is shown by Table 6.

TABLE 6.—A percentage analysis of the amount and source of State school revenue, 1927-28

States	Per cent of total public-school revenue derived from State source	Per cent of State school revenue derived from—			
		Income from permanent school fund	Appropriation from general State fund	Special tax for education	Other sources
1	2	3	4	5	6
Alabama	40.7		54.5	45.2	0.3
Arizona	20.1	13.9	56.0		.01
Arkansas	32.3	1.7	1.2	96.2	.5
California	19.5	2.2	96.8	1.0	
Colorado	3.2	97.5	2.5		
Connecticut	2.8	14.2	85.2		.5
Delaware	83.4	1.5	98.1		.3
Florida	9.0	12.9	7.4	77.1	2.6
Georgia	29.3		81.2	18.8	
Idaho	7.4	90.9	19.1		
Illinois	5.9	.7	99.3		
Indiana	7.8	17.2	5.9	76.2	.6
Iowa	4.3	22.4	77.0		
Kansas	1.8	67.8	32.2		
Kentucky	27.0	.1	.9	96.4	2.4
Louisiana	26.9	2.8	1.3	95.8	.01
Maine	30.1	1.0	5.7	93.2	
Maryland	18.2	7.9	28.4	63.5	.1
Massachusetts	13.2	3.9	96.1		
Michigan	16.2	2.3	2.5	95.2	
Minnesota	20.2	21.6	58.9	19.5	
Mississippi	31.9	1.1	98.9		
Missouri	10.1	25.0	74.9		
Montana	12.5	70.8	2.4	26.6	
Nebraska	5.6	55.0	28.0		16.9
Nevada	21.6	35.2	12.1	52.7	
New Hampshire	10.0	.2	53.5	43.9	.1
New Jersey	20.0	2.7	.1	97.2	
New Mexico	28.8	58.7	12.5	25.0	3.8
New York	26.8		100.0		
North Carolina	11.2	1.1	98.9		
North Dakota	10.0	76.8	23.2		
Ohio	4.9	4.2	95.8		
Oklahoma	7.1	81.6	1.1	17.3	
Oregon	13.4	14.9	1.6	83.3	
Pennsylvania	16.9	.3	99.7		
Rhode Island	13.2	.6	99.3		
South Carolina	23.7	.4	99.5		
South Dakota	9.3	96.8	3.2		
Tennessee	24.8	2.8	2.9	94.2	
Texas	35.7	7.8	92.0		.2
Utah	86.1	8.5	91.5		
Vermont	14.0	8.9	43.4	43.7	3.9
Virginia	26.6	8.1	94.4		2.5
Washington	30.4	12.7	1.1	82.8	3.4
West Virginia	7.7	1.9	50.0	35.4	2.5
Wisconsin	10.2	6.8	93.1		
Wyoming	32.7	47.2	4.9		47.9
United States	16.4	6.8	67.9	24.5	.7

¹ No separation of funds. ² Chiefly from general fund. ³ Schools receive major part of general fund.

Column 1 shows the per cent of total school revenue which was derived from State sources. This column is included in order that the reader may see the significance of State grants in relation to their source.

Permanent school funds have played an important part in American education. They now yield a small per cent of the yearly revenue produced by all States. In a few States, as indicated by column 2, the income for these funds is of great importance.

LOCAL SCHOOL SUPPORT

It was shown by Table 4 that the percentage of the total public-school revenue derived from State sources decreased during the decade and that, with a few exceptions, public-school support in this country is chiefly a matter of local endeavor. Recent investigations show that wherever local school district support is the rule, striking inequalities between schools exist. Some communities have adequate taxing wealth and are quite able to provide satisfactory school facilities, while many less favorably situated are unable to provide, even by taxing themselves to the limit, more than rudimentary educational facilities.

The situation described has developed in spite of efforts to prevent it. In practically all investigations concerning school finance attention is directed to the evils produced by the small district system of school support and definite recommendations are made embodying relief for local school taxing units. The chief relief measures proposed are (1) larger local taxing units—as a step toward economy and in order to even out some of the inequalities between very small school districts, and (2) adequate State school funds, in order to guarantee satisfactory school facilities for all the children of the State and as a step toward equalization.

Increasing local school tax rates.—Expanding school systems in many States have, during the decade, found school tax rate limitations a hindrance to growth. This situation has induced legislatures to permit local districts to levy higher rates and to alter the restrictions relating to school bond issues in several instances.

Legislation during the biennium 1928–1930 provided for higher maximum rates in California, Colorado, Florida, Kentucky, Michigan, Montana, Pennsylvania, and Texas. In most cases the additional rate may be levied only when authorized by vote of the district and for a special purpose. For example, the 1929 legislature in Colorado provided that the board of education of a county or union high-school district may submit to the voters the proposition of making a levy for high-school purposes, above the 4-mill limit, up to 6 mills, when it is thought a 4-mill levy will be insufficient. A constitutional amendment voted in Kentucky in 1930 permits boards of education of cities of the first five classes, with consent of two-thirds of the voters, to incur school bond indebtedness not to exceed 4 per cent of the taxable valuation of the district in which such city is

located. Previous to this amendment the bonded indebtedness which city-school districts in Kentucky could incur varied from 2 per cent in fourth-class cities to \$5,000,000 in first-class cities.

Enlarged taxing units.—One argument advanced for consolidation of schools is that an enlarged organization having more resources at its command than a small one can provide better educational facilities. However, when schools unite it does not necessarily mean enlarged taxing units. A large new school building in a city-school system may replace two or more old buildings in different parts of the city. Similarly the board of education of a township, or a county, school system may consolidate schools without affecting the size of the taxing unit. But thousands of small school districts have joined with others during the decade to form larger taxing units, thereby greatly reducing the number of small ones.

The rural high school, common throughout the country, is in many States the result of an enlarged taxing unit. One high-school district frequently includes the territory of and levies taxes on the property in several small elementary school districts for purposes of secondary education. By this means many communities have been able to secure funds for public-school improvement and extension and at the same time reduce the per capita cost of education.

Attention has already been called to the fact that legal provisions for State funds seldom keep pace with the increasing needs of a growing school system and that localities are obliged to levy an ever increasing tax as costs increase. The same may be said concerning legal provisions for funds from an intermediate unit, as the county. Consequently we find that for the country as a whole, the county provides a smaller percentage of the total public-school revenue than it did 10 years ago. In 1920 the per cent of school revenue derived from county sources was 11.4 of the total, in 1924 it was 10, and in 1928 it was 10.8. There are a few exceptions to this trend. County boards of education in Georgia under authority of legislation enacted in 1922 have increased the percentage of county school-revenue since that date. The per cent of total school revenue derived from county sources in Virginia in 1920 was 12.8, while in 1928 it was 57. County units of school administration, including taxing provisions, have been strengthened in a few States. In such cases the county usually assumes a more important place in the production of school revenue.

NEW STATE GRANTS FOR EDUCATION AND THEIR DISTRIBUTION

In attempting to help localities meet the increasing costs of education States have made various grants in the form of appropriations

for certain educational activities. The ad valorem school tax and the regular appropriation for public schools have been increased in a few instances. Grants for special purposes have been made recently for school libraries, for the education of atypical children; for pupil transportation, for consolidation, and for school buildings. In a number of instances the size of the grant has been increased for a certain length of time; in others the increase has been made permanent.

State aids such as those mentioned above performed important functions in educational development during the decade. They were made to relieve localities of a part of their school-tax burden or to promote certain activities. Hence they were distributed on the basis indicated in the grant when made for a special purpose, or usually on the basis of scholastic population when an increase in the general appropriation or ad valorem tax was granted. Other State aids of far-reaching importance in recent years are those made specifically to bring about equalization of educational opportunity. This is accomplished in the method of distribution. These grants are discussed at some length on the following pages.

Equalization funds.—Reviewing the conditions under which State grants for education have been made in our country, we find a number of different conceptions concerning the purposes of these grants. Swift states in his review of school finance for 1920-1922:¹

New York passed an act in 1812, three years prior to the first distribution of the revenue of her permanent common-school fund, requiring that in order to participate in the income of this fund the local community must raise by tax an amount equal to its share of the State fund. From this time on, in a considerable number of States, the purpose of State aid was conceived to be twofold: First, to ease the burden of local communities; second, to stimulate local effort. In general, State aid was distributed among counties and districts on the basis of total population or school population. No attempt was made to recognize differences in the ability of various communities to provide school revenues as represented by differences in valuation, or to recognize differences in effort as represented by differences in local school-tax rates. During the past few years, however, numerous reports and studies have pointed out the supreme importance of these factors, with the result that there has come into prominence a new conception of the fundamental purpose of State aid, namely, that of evening out the inequalities in school revenues and school opportunities existing among the various communities of the State and which in the last analysis are due to factors which the local communities frequently are unable to modify.

Since the time when Professor Swift wrote the above, inequalities in taxing wealth between school districts have been growing more pronounced. Wealth continues to concentrate in certain centers, while improved methods of transportation make it easier for working people to reside farther from their place of employment. There

¹ Swift, Fletcher Harper. *A Biennial Survey of Public School Finance in the United States, 1920-1922*. Washington, Government Printing Office, 1923. p. 19-20.

are many residence communities to-day, with little taxable wealth but dense populations of school age whose bread earners are employed in adjoining school districts with high valuations but few children. Furthermore, the great farm depression of the past few years has rendered many rural districts, and even whole counties, incapable of supporting satisfactory school systems.

Conditions such as these have been clearly pictured in a large number of recent survey reports which have received wide circulation. As a consequence a widespread interest in the subject of equalization of educational opportunity and of school support has been created and it is recognized to-day as never before that a State should distribute aid in such a way as to equalize the burden of supporting at least a minimum educational program in every school. That the importance of equalization is recognized is evidenced by the fact that one State after another has during the decade provided funds especially for distribution on the basis of financial ability to support a minimum program.

Certain data concerning funds in 20 States, which are either designated as equalization funds in the legislation establishing them or which are distributed chiefly for equalization purposes, are presented in Table 7. The States named do not comprise a complete list of those providing such funds, for provision has been made in no fewer than three-fourths of the States for equalizing to some extent the cost of a minimum educational program. Interesting features appear in provisions recently made in each State. The details shown in the table are typical of those in other States.

TABLE 7.—Equalization funds, their relative importance, source, and distribution in 20 States

State	Present law substantially the same as in—	Annual amount of fund	Per cent of total State aid devoted to equalization in 1927-28 ¹	Period for which fund is provided	Source	Distributed to school corporations
1	2	3	4	5	6	7
Alabama	1927	\$900,000	14	Year beginning Oct. 1, 1927; annually thereafter	Proceeds of railroad, telegraph, telephone, express, hydroelectric power, coal, iron ore, severance, sleeping car, and tobacco taxes.	Meeting specified requirements, including a minimum school tax, and unable without such aid to maintain minimum State standards.
Arkansas	1927	\$4,500,000 ¹	30	Biennium ending June 30, 1931.	One-half proceeds from tobacco tax and income tax.	Do.
Colorado	1921	Sufficient to guarantee a minimum salary of \$75 per month per teacher.	18	Annually	Permanent school income fund.	Do.
Connecticut	1923	Ranges from 10 per cent to 75 per cent of teachers' salaries in certain towns.	30	Annually	Appropriation from State general fund	Meeting certain requirements and making application for aid in towns having valuations of which exceed \$3,500,000.
Florida ²	1927	\$831,972	33	Biennium ended June 30, 1929.	One-third of proceeds of a 1-cent tax on gasoline, of one-fourth mill general property tax, and of the interest on State funds deposited in banks.	Meeting specified requirements, including a minimum school tax, and unable without such aid to maintain a school term of 120 days.
Georgia	1927	\$1,500,000 ³	20	Annually	Proceeds from a tax of one-half cent per gallon on gasoline and of 1 cent per gallon on kerosene.	Meeting certain requirements, including that of a local 5-mill school tax.
Kentucky	1930	\$1,250,000		do.	Appropriation from State's general fund.	Meeting specified requirements, including a minimum school tax, and unable without such aid to maintain a seven month's term and pay the teachers \$75 per month.
Michigan	1927	\$2,000,000 ⁴	14	do.	Appropriated from State's general fund.	Paying a local tax of more than 10 mills and having average school membership in excess of the average for the State for each \$100,000 of assessed valuation.

¹ Estimated.

² One-fourth of annual appropriation is set aside to be used by State board of education for erection of new school buildings in natural school centers.

³ The entire public-school fund in Florida, consisting of two-thirds of funds from the three sources mentioned for biennium ending June 30, 1931, is distributed on basis of aggregate attendance.

⁴ Approximate amount for year ended December 31, 1929.

⁵ In addition 5 per cent of primary school interest fund is apportioned on the same basis.

TABLE 7.—Equalization funds, their relative importance, source, and distribution in 20 States—(Continued).

State	Present law substantially the same as in	Annual amount of fund	Per cent of total State aid devoted to equalization in 1927-28	Period for which fund is provided	Source	Distributed to school corporations	
	1	2	3	4	5	6	7
Mississippi	1926	\$2,477,948.30	45	Biennium ending September, 1931	Appropriation from State's general fund		
Missouri	1927	Sufficient to pay total legal claims of districts eligible for aid, \$1,710,000.	20	Annually	Annual school fund, consisting of income from State public school (permanent) fund and one-third of the annual revenue of the State		
Montana	1927	\$328,472		do	One-half of income from inheritance, metal mines, and oil gross production tax and receipts from Federal Government from oil royalties.		
New Jersey	1925	10 per cent of proceeds of State school tax	10	do	Proceeds of State school tax		
New York	1925	Difference between allowances per teacher and proceeds of a local 6-mill school tax	20	do	State general fund		
North Carolina	1927	\$5,250,000	88	Biennium ending June 30, 1931	do		
Ohio	1923	\$4,000,000	75	Biennium ended Dec. 31, 1930	State general fund		
Oklahoma	1927	\$1,500,000	25	Annually	(One-sixth of the proceeds of the gross production tax on minerals not to exceed \$1,500,000)		
South Carolina	1924	Difference between total scheduled expense for teachers' salaries and proceeds of a 7-mill county school tax amounted to \$3,500,000 year ended June 30, 1930.	80	do	Appropriation from State's general fund		

By State board of education in such manner as possible throughout the State.

Four types of districts unable to maintain specified standards, provided requirements are met, including maximum local school tax rates.

For the purpose of equalization providing as nearly as possible nine-month terms in all public schools.

Which "contain too little taxable property to afford adequate local school taxes, according to reports submitted to State board of education.

Meeting specified requirements, including a minimum school tax and unable without such aid to maintain State standards.

Needing funds in addition to those produced by a 4-mill tax levy to support the State's minimum educational programs including a 6-month term.

Meeting specified requirements, including a minimum school tax, and unable without such aid to maintain State standards.

Levying the maximum 15-mill school tax and meeting certain State requirements, including an 8-month term.

To equalize taxation and educational opportunity in every school district in the State for 6 months, provided a 7-mill tax is levied and other conditions met.

State	1929	1930	1931	Annually	Source
Tennessee	\$900,000			20	Tobacco sales tax
Texas	\$2,500,000 ¹⁰			20	Appropriation from State's general fund.
Virginia	\$500,000				do

(Rural elementary schools.) In order to guarantee an 8-month term and a minimum program.
 In rural areas in the form of grants when certain requirements are met.
 For the equalization of elementary rural educational opportunities according to rules prescribed by State board of education.

⁶ Estimated for year ended June 30, 1929.
⁷ For year ended June 30, 1929.
⁸ An additional appropriation of \$1,250,000 for each year of the biennium for the support of an 8-month term.
⁹ In addition \$500,000 was appropriated from general fund for biennium ending June 30, 1931, to supplement regular fund.
¹⁰ \$1,600,000 was appropriated for each year of preceding biennium.



The dates in column 2 indicate recent legislative interest in the subject of educational equalization. During the biennium, 1928-1930, at least 15 States enacted new equalization laws, strengthened those already in force, or increased the appropriation for equalization grants. Similar legislation of great importance was passed two years earlier in a number of States. For example, the 1927 Alabama "Unified Education Bill" included an annual appropriation of \$900,000 for the equalization fund and the 1927 Illinois law providing a new method of distributing the State school fund guarantees an equalization quota to districts unable to maintain certain standards.

The Kentucky Legislature in 1930 provided for an annual equalization fund of \$1,250,000. Two constitutional amendments creating equalization funds were proposed by a special session of the Louisiana Legislature in September, 1930, and were voted favorably by the electorate in November of the same year. One amendment provides that 1 cent additional per gallon shall be levied on the retail sales of gasoline and that one-half of the proceeds shall be known as the State equalization fund for schools for the purpose of aiding the poorer parishes on basis of their educational needs. It is estimated that this tax will produce a million dollars annually for the equalization fund, and since it went into effect at once, plans for disbursing the proceeds have already been set up. The second amendment directs the Legislature to provide an annual minimum State school fund of \$12 per educable child, \$10 of which shall be apportioned to the parishes on the basis of the school census and the remainder when available, estimated at \$300,000, shall be assigned to the State equalization fund. The 1930 Utah Legislature also proposed a constitutional amendment creating an equalization fund. This amendment was voted favorably in November of the same year. It directs the legislature to provide for an annual fund amounting to \$5 per school child.

Among the States which provided for larger equalization funds during the biennium were Arkansas, Illinois, Michigan, Mississippi, New York, North Carolina, Ohio, Oklahoma, Tennessee, and Texas. Of these, Arkansas appropriated under the 1929 law to the equalization fund, which had been established in 1927, \$750,000 a year from the proceeds of the newly created income tax and an equal amount from the tobacco tax; Illinois increased the State distributive fund from which the equalization fund is derived 25 per cent; Michigan and North Carolina each doubled their appropriations for equalization 1929; Texas increased the annual amount for the biennium 1929-1931 over that for the preceding biennium from \$1,600,000 to \$2,500,000.

Percentages in column 4 of the table, estimated in a few cases, show that the equalization grants ranged from 88 per cent of the money provided by the State of North Carolina to 10 per cent in New Jersey. These percentages have added significance when the extent of State participation in public-school costs is known. For this information the reader is referred to Table 6 of this study.

Statutory provision for equalization funds in most instances stipulates the amount to be appropriated for each year; in a few States the amount is determined at the time the appropriation is made. The tendency in this respect seems to be toward the former plan. In 7 States a part or all of the proceeds of certain taxes are assigned to these funds; in 10, appropriations are made from the general State fund; while in 3 they are derived from some other State school fund. The method of distribution is based on the inability of the local school corporation to provide minimum standards in all cases with a wide variation in the details of the plans.

It has been pointed out that State grants have recently been made for various purposes. Obviously these are all made in order that education may be brought to all sections of the State. In the method of distributing school funds the question of equalization is frequently overlooked. But the foregoing description indicates that the ability of a school corporation to provide adequately is more generally recognized now than ever before as an important factor to be considered in framing legislation for State school support.

Procedure based on research.—A review of this kind can not be all inclusive. Many matters of importance which have developed in the field of educational finance must be omitted. However, this review should not close without at least a word concerning the development of the dominant tendency present throughout the country in the formation of legislation relative to school finance. This tendency has been toward a procedure based on careful research. Whether the question for consideration is one pertaining to the raising of revenue, taxing units, or distribution of funds, legislative assemblies are demanding as never before factual data before taking action. Official commissions have been authorized in no less than half the States during the past six years to bring together information to guide in formulating programs for financing the schools. Among the States in which such commissions were authorized during the biennium 1928-1930 are California, Connecticut, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Massachusetts, Michigan, North Carolina, and Pennsylvania.

This tendency is due chiefly to the influential work and leadership throughout the decade of such men as Professors Clark and Mort, of Columbia University; Swift, of California; and Morrison,

of Chicago; and that of various departments of education. The reliable information now available has brought the country to a realization of the fact that the time is at hand when State governments must give more attention to matters pertaining to educational finance, if education is not to retrench; certainly this is true if education is to continue the forward-looking program of previous decades. Legislatures are greatly interested in adequate school support, but, more and more, careful research will precede important legislative action concerning matters of educational finance.

