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EFFECTS OF THE DEPRESSION UPON
PUBLIC ELEMENTARY AND
SECONDARY SCHOOLS
AND UPON
COLLEGES AND UNIVERSITIES

BEING CHAPTER VI OF VOLUME I OF THE
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FOREWORD

During the period when the economic depression was having the most serious effect upon schools, the Office of Education presented relevant data in a number of different publications. This chapter of the Biennial Survey of Education reviews the most significant findings in those publications and draws them together as a permanent record of some of the most important effects of subnormal economic conditions of the period upon the schools. The lack of similar information of previous depressions made it evident that such a record is desirable.

Other chapters in the Commissioner's Biennial Survey, while not treating this problem specifically, will, nevertheless, indicate trends with respect to elementary, secondary, and higher education during the past several years, and will show what rebuilding and reorganization have followed the depression. This chapter also shows a number of new developments which are worth careful appraisal.

This chapter of the Biennial Survey of Education was prepared by W. S. Deffenbaugh, Chief of the Division of American School Systems, with the collaboration of certain members of the Office staff whose contributions are indicated at appropriate places.

BESS GOODYKOONTZ,
Assistant Commissioner of Education.

CHAPTER VI

EFFECTS OF THE DEPRESSION UPON PUBLIC ELEMENTARY AND SECONDARY SCHOOLS AND UPON COLLEGES AND UNIVERSITIES

I. PUBLIC ELEMENTARY AND SECONDARY SCHOOLS

The severe economic depression beginning about 1929 and continuing for several years thereafter resulted in financial losses or reduced incomes to millions of people. Savings were wiped out in an instant by bank failures, factories were closed or were operated at much less than full capacity, millions were unemployed and scarcely knew where to look for their next meal. The laborer, the farmer, the manufacturer, and countless others faced not only financial losses but the specter of fear, which in many instances affected their lives to as great an extent as actual financial losses, reduced wages, or incomes.

Every institution as well as every individual was affected. Of the public institutions, the schools were among the first to operate with reduced budgets. The effects of the economic depression, however, did not begin to be reflected in the schools until after 1930. At first only a school district here and there felt the effects, but by 1932 enough were affected to lower State and national averages with respect to practically every item in school budgets. The situation was so acute that it was a cause of apprehension not only on the part of school administrators and teachers but also on the part of every person and organization interested in the schools of the country.

The greatest reduction in school budgets and in the educational program occurred between 1932 and 1934. Comparatively few data are available to show conditions in 1935, but such as are available indicate that in general reductions in budgets ceased and that in some instances an upward trend began in 1935. The States that had received about \$14,000,000 from the Federal Government in 1934 to keep the rural schools open for the usual term required only about \$6,000,000 in 1935 for that purpose. Such data as have been compiled for 1936 show a great improvement over 1934 as is evidenced by the fact that the amounts of funds for current expenses, for teachers' salaries, and for capital outlay increased in a large number of States over those of 1934 and 1935. School terms were somewhat longer during the latter year in several States and many school services which had suffered reductions between 1930 and 1934 were restored. A study of per capita costs in city school systems for the years 1934, 1935, and 1936 reveals

that in more than 86 percent of the cities reporting the cost per pupil for current expenses during the last year was greater than in 1935 and that in more than 70 percent the per pupil cost was greater in 1935 than in 1934.

It thus appears that the effects of the economic depression on the schools were most pronounced during the school year 1933-34. This study therefore depends chiefly upon a summary of data compiled from various reports issued between 1930 and 1934 for statistical information. Regarding its scope, the study is confined to the effects of the depression upon the schools. What its effect was upon children and youth in general is another story that would require years of research to prepare. Several organizations, however, have been making extensive studies of the youth problem which came to the front in the early days of the depression.

Just to what extent children were affected because of reduced school budgets, because of shortened school terms in some States, because of large classes, and because of retrenchments in the educational program is not definitely known and probably never will be.

That school children were affected adversely due to conditions brought about in the schools because of the depression seems evident to the observer, but how much less they achieved than formerly cannot be stated quantitatively.

That the depression, or rather changed social and economic conditions, brought forcibly to the attention of school administrators and teachers many problems relating to school organization and the curriculum is also evident. Only a series of research studies will help solve such problems as the depression revealed and as are now confronting the schools. Many such problems are presented in *Research Memorandum on Education in the Depression*, by the Educational Policies Commission of the National Education Association, published as Bulletin 28, 1937, by the Social Science Research Council, New York, N. Y.

THE SITUATION IN 1929-30

It was not until several years after the World War that the schools began to be affected by the general prosperity of the country. Taking 1920 as a starting point the expenditures for public day schools increased rapidly until 1930 when the peak of expenditures was reached. In 1920 the total current expense item amounted to \$864,396,526 and in 1930 to \$1,843,551,708, or an increase of 113 percent. Within the 10-year period capital outlay increased from \$153,542,825 in 1920 to \$370,877,969 in 1930, or 83.3 percent. The peak of expenditures for capital outlay was, however, reached in 1925 when it amounted to \$433,584,559, or 182 percent more than in 1920. The average annual

salaries of supervisors, principals, and teachers increased from \$871 in 1920 to \$1,420 in 1930, or 63 percent.

In cities having a population of 10,000 or more the percentage increase in current expenses and capital outlay for school purposes from 1920 to 1930 was much greater than for the country as a whole. During the decade current expenses in cities of this size increased from \$375,111,624 to \$920,381,632, or 146 percent, as compared with an increase of 113 percent for the entire country. Capital outlay in these cities increased from \$59,724,864 in 1920 to \$200,757,495 in 1930, or 236 percent, as compared with an 83.3 percent increase for the country as a whole. The average salaries of teachers in cities increased from \$1,247 in 1920 to \$2,019 in 1930, or 62 percent, which is practically the same percentage increase as for the entire country.

That the schools were better supported in 1930 than at any previous time and that they were generally progressing is true, but they were still susceptible to improvement. There were many teachers who did not measure up to the generally accepted standards of professional preparation. Considering 2 years of college education as a standard for elementary school teachers, 26.2 percent fell below this standard, and considering 4 years of college education as a desirable standard for such teachers, 87.9 percent had not attained it. In comparing the preparation of elementary school teachers by size of location the following proportions of teachers were below the 2-year standard:

	<i>Percent</i>
Open country, 1- and 2-teacher schools.....	61.8
Open country, 3- or more teacher schools.....	28.4
Villages of less than 2,500 population.....	21.0
Cities of 2,500 to 9,999 population.....	12.6
Cities of 10,000 to 99,999 population.....	10.5
Cities of 100,000 or more population.....	9.2

Considering 4 years of college work as a standard for secondary school teachers, 39.6 percent of the junior high and 12.9 percent of the senior high school teachers had not attained this standard.

Teachers' salaries in general were not high, the average for the entire country being only \$1,420; 58.4 percent of the rural white teachers were receiving less than \$1,000 a year, 27.6 percent less than \$800 a year, and 7.4 percent less than \$600 a year; 96 percent of the rural Negro teachers were receiving less than \$1,000 a year, 52.2 percent less than \$400 a year, and 34.1 percent were receiving less than \$300 a year. The median salary for rural white teachers for all types of rural schools was \$945; for 1-teacher schools, \$883. The median salary for all types of rural schools for Negroes was \$388 and for 1-teacher schools, \$314.

The average school term for the entire country was only 172.7 days. In the cities having a population of 2,500 or more the average was 184.5 days and the remainder of the country only 160.6 days. In 30 States reporting there were 717,183 children enrolled who had school terms of not more than 120 days and 142,256 who had school terms of not more than 80 days. If all of the States had reported, the number of children having school terms of not more than 120 days probably would have been over a million, and the number having school terms of not more than 80 days probably would have been over 200,000.

Many services needed to be expanded and improved especially in the rural school districts, such as supervisory, health, and library services. There was lack of supervision in the school districts under county superintendents. Of 1,830 counties reporting on the number of supervisory assistants to the county superintendents only 812 employed such assistants. Of the 1,830 counties 1,410 employed no supervisory assistants; 223 employed 1; 118, 2; 51, 3; 14, 4; 5, 15; 1, 6; 1, 7; 3, 8; only 3 employed more than 8. The distribution of the 641 supervisors as to the nature of the work was as follows: 280 supervised all grades; 93, grades 1 to 6; 9, grades 1 to 7; 9, grades 10 to 12; 59 supervised Negro schools; 58 supervised music; 29, art; 21, health education; 18, miscellaneous subjects and activities; 17, home economics; 16, physical education; 16, agriculture; 10, high school; 3, curriculum; 3, penmanship. These data show clearly that even in the 420 counties that employed supervisors there was little professional supervision, especially in the fields of music, art, health and physical education, home economics, and agriculture. Even the city schools were not overstaffed with general and special supervisors. They were, however, faring much better than the rural schools with respect to supervision since practically every city having a population of 10,000 or more employed both general and special supervisors in addition to supervising principals for each of the buildings.

* Equality of opportunity for the fullest development of the individual powers of every child is a part of the American philosophy of education. This opportunity did not exist in many respects for thousands of children, and especially for the thousands of physically and mentally handicapped. Accurate data showing the number of children who needed special attention and the number enrolled in special schools and classes for exceptional children in 1930 are not available. Table I, however, shows the approximate number of cities having a population of 10,000 or more that maintained various types of special schools and classes for exceptional children in 1930, the enrollment in each type, and the estimated number of children who should have been in such schools and classes.

TABLE 1.—CITY SCHOOL PROVISIONS FOR EXCEPTIONAL CHILDREN IN 1930, WITH ESTIMATED FIGURES OF INCIDENCE

Type of exceptional child	Number of cities reporting	Number of pupils enrolled in cities reporting	Estimated number of exceptional children needing special education ¹
1	2	3	4
Mentally deficient.....	315	55, 154	500, 000
Deaf and hard-of-hearing.....	105	3, 907	500, 000
Blind and partially seeing.....	106	5, 000	50, 000
Speech defective.....	65	52, 112	1, 000, 000
Anaemic and tubercular.....	126	31, 186	6, 000, 000
Crippled.....	93	10, 116	100, 000
Delinquent, unstable.....	55	9, 040	750, 000
Gifted.....	30	3, 883	500, 000

¹ Adapted from White House conference report.

If cities and towns of less than 10,000 population had been included the number of children enrolled in special schools and classes would have been somewhat increased, though the provision for such schools and classes in these small communities was very limited. Although the American philosophy of education would offer opportunity for the vast number of exceptional children, it is evident that such opportunity at the close of the prosperous era was largely a matter of theory rather than one of actuality.

As stated in the Biennial Survey of the Commissioner of Education for 1928-30 regarding schools and classes for exceptional children, "One cannot help but be almost overwhelmed when one compares the figures for the groups of exceptional children, giving the estimated incidence on the one hand and on the other hand the number of children provided for—the contrast is appalling."

The value of kindergartens has long been recognized by educators, but even with this recognition there were in 1930 only 955, or about one-third of the cities having a population of 2,500 or more, that maintained kindergartens. The number of children enrolled in kindergartens in the cities was 665,352, or only 27.8 percent of the 2,390,92 children 4 or 5 years of age living in urban communities. In the village and rural communities very few of the 2,483,223 children 4 and 5 years of age living in such communities were enrolled in kindergartens. It thus appears that kindergarten advantages were available for only a very small percentage of the children of the country.

Although millions of dollars were expended between 1920 and 1930 in the erection of school buildings there still remained in 1930 need for additional schoolhouses, some to care for increased enrollments and some to replace antiquated, unsafe, and insanitary buildings.

The White House conference report commenting upon the school building situation says:¹

A visit to a modern elementary or high-school building in any of the progressive communities of America is likely to leave the impression that the health and physical well-being of American school children are being cared for in a manner to make any citizen proud of the high regard of his community for its children. There is a large and ever increasing number of communities in which such high regard is evident. But it would be unwise in the extreme to assume that school children throughout the country generally are receiving the attention they deserve simply because great advances have been made in certain localities in matters of schoolhouse planning, location, and construction, and the provision of adequate playgrounds. * * *

Many communities have a long way to go before they can even approximate desirable conditions for their boys and girls. The examination of educational periodicals and yearbooks does not bring to light the unwholesome conditions which prevail in many localities; buildings which are dark and dingy and unsanitary; others which are veritable fire traps; school sites which make no provision whatsoever for play space; others located in the most unwholesome and unsatisfactory surroundings with toilet facilities which are unspeakably filthy and woefully inadequate. * * * Children are attending schools in basement rooms in which no sunlight ever enters; they are being exposed every day to danger of injury or loss of life because of the condition of the buildings in which they are housed.

Data on other phases of education might also be presented to show that school conditions in 1930, or just before the depression hit the schools, were far from ideal and in thousands of communities far below the practices in the better schools of the country. There was need for expansion rather than for retrenchment.

FINANCIAL SUPPORT

Income.—During the period when the depression was affecting the schools, the income from appropriations and taxation from State and local sources decreased in all but five States. The average decrease for the entire country from 1929-30 to 1933-34 was 13.3 percent. The median decrease, however, was 18.8 percent. In the 22 States showing the greatest decrease, the average amounted to 20 or more percent. In 11 of these 22 States the decrease ranged from 20 to 29.9 percent; in 9 of them it ranged from 30 to 39.9 percent; and in the remaining 2, Michigan and Mississippi, it amounted to 41 and 51.5 percent, respectively.

Considering all other sources of revenue the amount derived from permanent school funds was 16.3 percent less, from leases of school lands 42.2 percent less, and from Federal grants 193.8 percent more in 1933-34 than in 1929-30. The great increase in Federal funds for school purposes during this period resulted from \$14,536,010 in

¹ Report of the White House Conference on Child Health and Protection, sec. III, Education and Training.

Federal Government grants in 1933-34 for the purpose of helping to keep schools open in financially distressed rural school districts.

The income from county appropriations and taxes decreased from \$209,331,343 in 1929-30 to \$162,279,502 in 1933-34, or 22.4 percent; the income from local school taxes decreased from \$1,436,356,308 to \$1,155,619,214, or 19.5 percent; while the income from State appropriations and taxes increased from \$329,312,434 to \$402,500,724, or 18.2 percent.

Assessments and tax rates.—The decrease in income especially from local sources was due to lower assessments and lower tax rates for school purposes. Data regarding assessments and tax rates for school purposes in 1930 and 1934 are available only for cities having a population of 10,000 or more. In these cities the assessed valuation of property taxed for school purposes decreased 11.8 percent, and the tax rate decreased from 11.4 mills in 1930 to 9.1 mills in 1932, or 20.1 percent. If data on these points were available for the small cities the decrease both in assessment and in tax rates would probably be much greater than in the large cities. Data showing change in tax rates and in assessments from 1931 to 1932 and from 1932 to 1933 were, however, compiled for about 1,200 cities having a population of 2,500 or more.

From 1931 to 1932 there was a slight decrease in the assessed valuation of city school districts in every section of the country except in the North Atlantic States where there was an increase of 1.3 percent (table 2).

TABLE 2.—PERCENTAGE OF CHANGE IN ASSESSED VALUATION OF CITY SCHOOL DISTRICTS FROM 1930-31 TO 1931-32, BY REGION

Region	Size of city				Average for all cities
	Group I	Group II	Group III	Group IV	
1	2	3	4	5	6
North Atlantic.....	+1.6	-2.3	+1.9	-1.6	+1.3
North Central.....	-5.2	-7.3	-5.9	-6.7	-6.0
South Atlantic.....	+3.2	-3.3	-6.1	-7.1	-4.7
South Central.....	-2.4	-5.6	-0.8	-6.2	-3.1
Western.....	-3.2	-0.8	-0.4	-4.4	-2.9
United States.....	-0.0	-4.5	-2.3	-3.3	-1.1

The percentage of cities reducing the tax rate for school purposes was greater than the percentage of cities reducing the tax rate for other government purposes in 549 cities reporting. In 47.9 percent of these cities the tax rate for school purposes decreased, while in only 39.5 percent did the tax rate for other purposes decrease. Upon the other

hand, while 15.1 percent of the cities reporting increased the school tax rate, 25.9 percent increased the rate for other purposes (table 3).

The trend to reduce tax rates for schools more frequently than for other purposes is true for each group of cities; for example, considering the 60 cities having a population of 30,000 to 100,000, 56.7 percent decreased the rate for schools, while only 41.7 percent decreased the rate for other governmental expenses. Twenty-three of the cities increased the rate for nonschool purposes, while only 10 increased the rate for schools. It thus appears that in the cities reporting, the declining tax rates were more commonly affecting the school than they were other enterprises of government.

TABLE 3.—CHANGE IN TAX RATE FOR SCHOOLS AND FOR ALL OTHER PURPOSES, 1932 TO 1933

Tax rate	Size of city								Total (549 cities reporting)	
	Group I (23 cities reporting)		Group II (60 cities reporting)		Group III (114 cities reporting)		Group IV (352 cities reporting)			
	Number of cities	Per- cent	Number of cities	Per- cent	Number of cities	Per- cent	Number of cities	Per- cent	Number of cities	Per- cent
1	2	3	4	5	6	7	8	9	10	11
For schools:										
Increase.....	6	26.1	10	16.6	23	20.2	44	12.5	89	7.1
Same.....	6	26.1	16	26.7	32	28.1	149	42.3	203	37.0
Decrease.....	11	47.8	34	56.7	59	51.7	159	45.2	263	47.9
For all other purposes:										
Increase.....	13	56.5	23	38.3	35	30.7	71	20.2	142	25.9
Same.....	3	13.0	12	20.0	25	21.9	150	42.6	190	34.6
Decrease.....	7	30.5	25	41.7	54	47.4	131	37.2	217	39.5

The same general tendency continued and was much the same in 1932-33 when the reduction in assessed valuation in 1,200 cities reporting reached 7.1 percent. Each group of cities in each section of the country showed a decrease (table 4).

TABLE 4.—PERCENTAGE OF CHANGE IN ASSESSED VALUATION OF CITY SCHOOL DISTRICTS FROM 1931-32 TO 1932-33, BY REGION

Region	Size of city				Average for all cities
	Group I	Group II	Group III	Group IV	
North Atlantic.....	-5.2	-0.3	+0.7	+0.5	-4.4
North Central.....	-13.2	-15.7	-8.1	-9.6	-12.4
South Atlantic.....	-4.4	-3.6	-12.4	-8.5	-6.2
South Central.....	-9.5	-8.7	-9.4	-14.0	-10.2
Western.....	-15.6	-10.0	-9.2	-13.0	-14.0
United States.....	-7.2	-7.6	-5.4	-7.1	-7.1

Many cities reporting on assessments did not report on tax rates; 867 of them, however, reported on both assessments and tax rates for 1931-32 and 1932-33. In 629 of these cities the assessment had been lowered. In 311, the tax rate for schools was lower in 1932-33 than in 1931-32; in 223, the rate remained the same; and in 95, the rate was slightly increased (table 5).

TABLE 5.—CHANGE IN TAX RATE FOR SCHOOL PURPOSES IN RELATION TO CHANGE IN ASSESSMENT, 1932 TO 1933

	Size of city									
	Group I		Group II		Group III		Group IV		Total	
	Number of cities	Per cent	Number of cities	Per cent	Number of cities	Per cent	Number of cities	Per cent	Number of cities	Per cent
As assessment increased in.....	4		18		38		86		146	
The tax rate increased in.....	0	0.0	2	11.1	5	13.1	9	10.4	16	11.0
Tax rate remained the same in.....	2	50.0	2	11.1	9	23.7	20	23.3	33	22.6
The tax rate decreased in.....	2	50.0	14	77.8	24	63.2	57	66.3	97	66.4
As assessment decreased in.....	29		59		150		391		629	
The tax rate increased in.....	5	17.2	11	18.6	24	16.0	55	14.1	95	15.1
Tax rate remained same in.....	10	34.5	15	25.4	47	31.3	151	38.6	223	35.5
The tax rate decreased in.....	14	48.3	33	56.0	79	52.7	185	47.3	311	49.4
As assessment remained the same in.....			5		18		65		92	
The tax rate increased in.....			0	0	4	22.2	5	7.2	9	9.8
The tax rate remained the same in.....			3	60.0	10	55.6	36	52.2	49	53.3
The tax rate decreased in.....			2	40.0	4	22.2	28	40.6	34	36.9

NOTE.—The above reads: As assessment increased in 4 cities of group I, the tax rate increased in none, remained the same in 2, and decreased in 2, and as assessment decreased in 29 cities of group I, the tax rate increased in 5, remained the same in 10, and decreased in 14, etc.

Current expenses.—From 1930 to 1934 current expenses for schools in continental United States decreased from \$1,843,551,708 to \$1,515,530,198, or 17.8 percent. During the 4-year period current expenses decreased in every State except Delaware (table 6). In that State the average increase during the 4 years was 7 percent, there having been an increase of 12.8 percent from 1930-32 and a decrease of 5.2 percent from 1930 to 1934. The average decrease from 1930 to 1934 ranged from 2.6 percent in New York to 38.2 percent in North Carolina. In 4 States current expenses were reduced from 35 to 40 percent; in 7 States from 30 to 34.9 percent; in 11 States from 25 to 29.9; in 3 States from 20 to 24.9 percent; in 12 States from 10 to 19.9 percent; and in 11 States less than 10 percent.

TABLE 6.—CURRENT EXPENSES, 1929-30 AND 1933-34, AND PERCENTAGE INCREASE OR DECREASE,¹ BY STATES

State	1930	1934	Percentage decrease
1	2	3	4
Continental United States.....	\$1,843,551,708	\$1,515,530,198	17.8
Alabama.....	17,652,225	15,281,193	13.4
Arizona.....	8,289,546	5,909,717	28.7
Arkansas.....	11,101,551	7,844,132	29.3
California.....	121,136,633	107,917,132	11.0
Colorado.....	21,125,901	15,378,576	27.2
Connecticut.....	28,155,339	23,444,098	16.7
Delaware.....	3,448,498	3,688,808	+7.0
District of Columbia.....	9,043,813	8,196,504	9.4
Florida.....	13,516,229	12,211,844	9.7
Georgia.....	17,166,356	16,703,459	3.0
Idaho.....	8,553,928	5,931,755	30.7
Illinois.....	123,430,692	91,818,435	25.6
Indiana.....	54,696,666	39,329,061	28.1
Iowa.....	41,692,503	31,071,253	26.5
Kansas.....	33,857,923	22,125,448	33.7
Kentucky.....	20,009,576	15,748,876	21.3
Louisiana.....	16,847,280	13,787,671	18.2
Maine.....	9,647,509	7,803,011	19.1
Maryland.....	18,880,053	17,312,285	8.3
Massachusetts.....	74,034,720	66,905,157	9.6
Michigan.....	96,968,550	60,276,738	37.8
Minnesota.....	46,271,102	36,059,327	22.1
Mississippi.....	15,757,723	10,665,915	32.3
Missouri.....	40,513,185	36,861,955	9.0
Montana.....	11,557,838	8,385,843	27.4
Nebraska.....	24,123,984	15,943,443	33.9
Nevada.....	2,039,602	1,926,408	5.5
New Hampshire.....	6,119,532	5,489,053	10.3
New Jersey.....	82,801,149	71,789,161	13.3
New Mexico.....	5,884,701	5,289,343	10.1
New York.....	256,705,491	250,032,878	2.6
North Carolina.....	28,830,362	18,296,364	36.5
North Dakota.....	14,794,184	9,138,349	38.2
Ohio.....	109,213,169	86,292,654	21.0
Oklahoma.....	30,780,341	21,499,759	30.2
Oregon.....	16,030,009	11,661,899	27.2
Pennsylvania.....	145,861,417	133,057,357	8.8
Rhode Island.....	9,821,214	9,415,674	4.1
South Carolina.....	13,933,522	10,280,279	26.2
South Dakota.....	13,219,921	8,492,546	35.8
Tennessee.....	20,560,079	17,704,563	13.9
Texas.....	58,597,695	50,070,685	14.6
Utah.....	9,052,640	7,464,375	17.5
Vermont.....	4,883,970	3,498,209	28.4
Virginia.....	20,028,944	18,261,378	8.8
Washington.....	27,976,728	19,622,984	29.9
West Virginia.....	25,265,495	18,284,495	27.7
Wisconsin.....	44,566,798	37,177,937	16.6
Wyoming.....	6,137,422	4,181,912	31.9

¹ There was a decrease in every State except Delaware.

The figures in table 6 are only averages. In many school districts the reductions amounted to more than 50 percent. In fact, as early as 1931-32 it was found that such decreases had been made since 1930-31 in some of the counties (table 7).

TABLE 7.—CHANGES IN CURRENT EXPENDITURES REPORTED BY COUNTY AND OTHER SUPERINTENDENTS OF RURAL SCHOOLS, FOR THE PERIOD 1930-31 TO 1931-32, BY STATES

State	Number of counties reporting ¹	Number of counties showing—			Decreases or increases in percent during period, 1930-31 to 1931-32		
		Decreases	Increases	No change	Highest decrease in any county	Average decrease for all counties reporting	Highest increase in any county ²
1	2	3	4	5	6	7	8
Continental United States.....	1,106	707	251	148	58.1	5.0	50.0
Alabama.....	9	5	2	2	12.5	4.3	11.8
Arizona.....	4	2	2	0	10.8	5.4	2.1
Arkansas.....	15	15	0	0	54.3	23.7	-3.8
California.....	28	14	14	0	11.3	8.2	8.5
Colorado.....	16	13	2	1	26.5	7.5	18.7
Connecticut.....	4	2	1	1	3.1	+1.7	5.3
Florida.....	18	10	5	3	27.4	5.7	21.4
Georgia.....	15	6	2	7	13.6	0.5	2.0
Idaho.....	15	12	2	1	18.9	9.9	5.6
Illinois.....	43	26	12	5	33.3	1.3	36.7
Indiana.....	46	36	6	4	48.5	8.1	36.4
Iowa.....	28	23	3	2	25.4	6.8	17.4
Kansas.....	31	23	2	6	31.3	6.5	11.9
Kentucky.....	40	21	9	10	30.2	4.5	41.7
Louisiana.....	17	10	6	1	19.2	1.5	4.7
Maine.....	44	22	9	13	26.7	.9	9.7
Maryland.....	11	8	3	0	14.6	3.8	8.1
Massachusetts.....	46	23	17	6	8.7	+9	33.8
Michigan.....	28	12	2	14	22.8	3.0	16.8
Minnesota.....	25	17	3	5	34.9	6.9	12.1
Mississippi.....	13	12	0	1	58.1	21.4	0
Missouri.....	28	22	4	2	51.3	9.8	15.1
Montana.....	13	11	0	2	27.2	10.2	0
Nebraska.....	34	24	3	7	23.2	2.3	6.4
New Hampshire.....	14	7	4	3	18.9	4.2	4.1
New Jersey.....	13	3	10	0	.1	+9	7.2
New Mexico.....	12	7	1	4	15.3	3.6	7.0
New York.....	72	17	52	3	23.6	+2.5	29.7
North Carolina.....	20	17	3	0	46.1	18.1	12.9
North Dakota.....	13	12	1	0	50.8	15.0	.5
Ohio.....	28	23	4	1	33.2	4.2	18.8
Oklahoma.....	22	16	1	5	21.5	6.8	27.8
Oregon.....	15	10	2	3	40.7	5.9	10.8
Pennsylvania.....	27	7	16	4	10.8	+1.5	19.1
Rhode Island.....	3	1	2	0	2.2	+2.1	9.1
South Carolina.....	4	4	0	0	31.7	19.9	-8
South Dakota.....	24	22	1	1	33.3	14.3	15.6
Tennessee.....	32	27	1	4	27.2	7.6	4.6
Texas.....	74	50	14	10	25.0	5.0	50.0
Utah.....	16	16	0	0	35.6	16.8	-5
Vermont.....	38	15	10	13	15.6	1.1	42.9
Virginia.....	25	22	2	1	21.9	5.7	2.6
Washington.....	20	17	3	0	29.3	6.7	13.7
West Virginia.....	23	14	7	2	20.3	4.4	5.4
Wisconsin.....	33	24	8	1	18.7	5.6	36.6
Wyoming.....	7	7	0	0	13.4	8.5	-5.4

¹ County, district, town, and other units of rural school administration.

² Percentages with minus signs should be read as lowest decreases.

Cost per pupil.—The cost per pupil in average daily attendance in the United States decreased from \$86.70 in 1930 to \$81.08 in 1932, and to \$67.48 in 1934. Within the 4-year period the cost per pupil

decreased 22.2 percent. From 1930 to 1934 there was a decrease in every State, ranging from 2.4 percent in Delaware to 43.6 percent in North Carolina (table 8). In 17 States the decrease amounted to 30 percent or more; in 8 States from 25 to 29.9 percent; in 5 States from 20 to 24.9 percent; in 8 States from 15 to 19.9 percent; in 8 States from 10 to 14.9 percent; and in only 3 States to less than 10 percent.

TABLE 8.—AVERAGE ANNUAL COST PER PUPIL IN AVERAGE DAILY ATTENDANCE, 1930 AND 1934, AND PERCENTAGE DECREASE, BY STATES

State	Cost per pupil		Percentage decrease
	1930	1934	
1	2	3	4
Continental United States	\$86.70	\$67.48	22.2
Alabama	37.28	30.09	19.3
Arizona	109.12	77.11	29.3
Arkansas	33.56	22.60	32.7
California	133.30	109.83	17.6
Colorado	110.76	78.30	29.3
Connecticut			
Delaware	102.58	82.12	19.9
District of Columbia	95.12	92.85	2.4
Florida	132.39	107.30	19.0
Georgia	50.61	40.73	19.5
	31.89	28.34	11.1
Idaho			
Illinois	86.86	57.09	34.3
Indiana	102.56	78.18	23.8
Iowa	91.66	60.20	34.3
Kansas	96.10	65.44	31.9
	92.81	60.19	35.1
Kentucky			
Louisiana	46.23	33.37	27.2
Maine	48.19	36.02	25.3
Maryland	69.89	52.09	25.5
Massachusetts	80.15	68.64	14.4
	109.57	95.69	12.7
Michigan			
Minnesota	114.76	67.68	41.0
Mississippi	101.29	75.15	25.8
Missouri	36.13	23.55	34.8
Montana	70.28	60.27	14.2
	109.73	79.24	27.8
Nebraska			
Nevada	93.08	57.48	38.2
New Hampshire	136.18	117.90	13.4
New Jersey	92.77	79.67	14.1
New Mexico	124.90	102.53	17.9
	77.21	60.18	22.1
New York			
North Carolina	137.55	124.13	9.8
North Dakota	42.85	24.18	43.6
Ohio	99.55	67.32	32.4
Oklahoma	95.69	72.51	24.2
	65.48	43.70	33.3
Oregon			
Pennsylvania	103.31	68.90	33.3
Rhode Island	87.81	75.04	14.5
South Carolina	95.74	86.97	9.2
South Dakota	39.98	27.14	32.1
	95.36	62.29	34.7
Tennessee			
Texas	42.66	34.62	18.8
Utah	54.57	46.63	14.6
Vermont	75.08	58.71	21.8
Virginia	84.24	59.76	29.1
	44.26	37.51	15.2
Washington			
West Virginia	100.45	69.16	31.1
Wisconsin	72.16	48.54	32.8
Wyoming	94.17	71.99	23.6
	128.69	88.70	31.0

In cities having a population of 2,500 or more the cost per pupil in average daily attendance decreased from \$100.95 in 1930 to \$83.67 in 1934; and in the remainder of the country from \$72.10 in 1930 to \$50.30 in 1934. In the city school districts the reduction amounted to 17.1 percent and in the rural school districts to 30.1 percent.

TABLE 9.—COST PER PUPIL IN AVERAGE DAILY ATTENDANCE BY CITY POPULATION GROUPS IN 1930 AND IN 1934, AND THE PERCENTAGE DECREASE

Population group	1930	1934	Percentage decrease
100,000 or more.....	\$119.17	\$99.56	16.5
30,000 to 99,999.....	98.03	83.35	14.9
10,000 to 29,999.....	85.75	69.10	19.4
2,500 to 9,999.....	79.02	63.55	19.6

Data to show by type of school the decrease in cost per pupil are available only for cities having a population of 10,000 and over and for instruction only (table 10).

TABLE 10.—COST PER PUPIL BY TYPE OF SCHOOL, 1930 AND 1934, AND PERCENTAGE DECREASE

Type of school	1930	1934	Percentage decrease
Kindergartens.....	\$54.93	\$47.01	14.4
Elementary schools.....	69.01	59.98	13.1
Junior high schools.....	93.95	77.56	17.4
High schools (including senior high).....	122.35	90.81	25.7
Vocational high schools.....	189.21	135.53	28.4

From 1930 to 1934 there was a decrease in the cost per pupil for each of the major current expense items which can be given for the country as a whole and for cities having a population of 10,000 or more. From the data presented in table 11 it is evident that for each function, with the exception of maintenance and auxiliary agencies, the greatest percentage decrease occurred in small cities and rural areas.

TABLE 11.—COST PER PUPIL BY FUNCTION AND PERCENTAGE DECREASE, 1930 TO 1934

Function	Continental United States			Cities having a population of 10,000 or more		
	1930	1934	Percentage decrease	1930	1934	Percentage decrease
	1	2	3	4	5	6
General control.....	\$3.70	\$2.86	22.7	\$3.61	\$3.03	16.0
Instruction.....	61.97	49.91	19.4	82.21	68.63	16.5
Operation.....	10.16	6.93	31.8	10.57	9.01	14.8
Maintenance.....	3.71	2.13	42.6	4.75	2.65	44.2
Auxiliary agencies.....	4.80	3.84	20.0	3.42	2.60	24.0
Fixed charges.....	2.36	1.81	23.3	2.72	2.60	4.4

Capital outlay.—Although thousands of new school buildings were needed, capital outlay decreased rapidly between 1929-30 and 1933-34. For the entire country, capital outlay decreased from \$370,877,969 in 1929-30 to \$210,996,262 in 1931-32, and to \$59,276,555 in 1933-34. Within the 4-year period the decrease amounted to 84 percent. In 12 States the percentage decrease amounted to more than 90 percent (table 12).

Of the total expenditure for school purposes in 1929-30, excluding payments on bonds and other indebtedness, 16.1 percent was for capital outlay, and in 1933-34 only 3.5 percent was for this purpose. Within the 4-year period the cost per pupil in average daily attendance for capital outlay decreased from \$17.41 to \$2.64, or 84.8 percent.

TABLE 12.—CAPITAL OUTLAY, 1929-30 AND 1933-34 AND PERCENTAGE DECREASE, BY STATES

State	1929-30	1933-34	Percentage decrease
1	2	3	4
Alabama.....	\$3,567,154	\$1,277,601	64.2
Arizona.....	1,769,012	113,755	93.6
Arkansas.....	2,158,736	457,824	78.8
California.....	25,806,203	6,263,864	75.7
Colorado.....	1,790,813	186,510	89.6
Connecticut.....	5,493,042	328,919	94.0
Delaware.....	1,495,932	612,133	59.1
District of Columbia.....	3,493,515	850,915	74.8
Florida.....	1,485,379	235,081	84.2
Georgia.....	1,414,647	1,041,857	26.4
Idaho.....	1,033,350	221,103	78.6
Illinois.....	26,411,745	4,905,406	81.4
Indiana.....	8,302,825	1,229,035	85.2
Iowa.....	3,712,663	295,949	92.0
Kansas.....	4,924,420	2,482,056	49.6
Kentucky.....	2,543,696	595,208	76.6
Louisiana.....	3,233,436	239,504	92.6
Maine.....	875,234	61,417	93.0
Maryland.....	3,958,610	2,219,784	43.9
Massachusetts.....	11,936,438	3,233,426	72.9
Michigan.....	21,439,326	1,546,237	92.8
Minnesota.....	5,284,053	1,076,699	79.6
Mississippi.....	1,631,782	413,397	74.7
Missouri.....	12,928,614	1,756,029	86.4
Montana.....	1,579,807	163,332	89.7
Nebraska.....	2,087,149	389,813	81.3
Nevada.....	605,135	41,664	93.1
New Hampshire.....	548,299	123,493	77.5
New Jersey.....	24,228,261	1,924,322	92.1
New Mexico.....	506,831	58,629	88.4
New York.....	78,441,654	8,203,840	89.5
North Carolina.....	4,809,151	942,409	80.4
North Dakota.....	1,497,152	249,936	83.3
Ohio.....	24,554,248	1,932,771	92.1
Oklahoma.....	2,021,774	916,100	54.7
Oregon.....	2,652,041	179,823	93.2
Pennsylvania.....	29,168,383	4,294,602	85.3
Rhode Island.....	2,355,533	142,254	94.0
South Carolina.....	1,262,956	268,893	78.7
South Dakota.....	996,035	236,046	76.3

TABLE 12.—CAPITAL OUTLAY, 1929-30 AND 1933-34, AND PERCENTAGE OF DECREASE, BY STATES—Continued

State	1929-30	1933-34	Percentage decrease
	2	3	4
Tennessee.....	\$1,642,928	\$418,113	74.5
Texas.....	14,801,906	2,258,234	84.7
Utah.....	1,939,039	220,929	88.6
Vermont.....	614,583	23,964	96.1
Virginia.....	2,737,689	1,094,017	60.0
Washington.....	3,942,449	538,473	86.3
West Virginia.....	2,330,012	451,959	80.6
Wisconsin.....	8,565,770	2,422,665	71.7
Wyoming.....	298,857	106,445	64.4
Continental United States.....	370,877,969	59,276,555	84.0

In cities having a population of 2,500 or more, capital outlay decreased 87.6 percent from 1930 to 1934, which was a little greater than the percentage decrease for the country as a whole.

The cost per pupil in average daily attendance for capital outlay in the cities decreased from \$22.13 in 1929-30 to \$2.55 in 1933-34, or 88.4 percent. In cities of group I the cost per pupil decreased from \$26.37 to \$2.96; in cities of group II from \$21.06 to \$2.69; in cities of group III from \$20.75 to \$2.42; and in cities of group IV from \$15.70 to \$1.88.

The percentage decrease in terms of costs per pupil was about the same for each group of cities. The decrease in group I was 88.8 percent; in group II, 86.7 percent; in group III, 88.3 percent; and in group IV, 88 percent.

THE SCHOOL TERM

When the effects of the depression were beginning to be felt by the schools, grave fear was expressed that the school term throughout the country would be greatly reduced in length. In some school districts in several of the States, school terms were shortened, but even so the average length of school term for the entire country decreased only 1.1 days from 1929-30 to 1933-34, and 1.5 days from 1929-30 to 1931-32; the average length of the school term in 1930 being 172.7 days; in 1932, 171.2 days; and in 1934, 171.6. From 1929-30 to 1933-34 there was a decrease in the average length of the school term in 29 States. In 10 States the average decrease was 5 or more days; in 4 of these States the average decrease was from 10 to 12.4 days (table 13).

TABLE 13.—AVERAGE NUMBER OF DAYS SCHOOLS WERE IN SESSION IN 1929-30, 1931-32, 1933-34, BY STATES.

State	1929-30	1931-32	1933-34	Increase or decrease in days		
				1930-32	1932-34	1930-34
1	2	3	4	5	6	7
Continental United States	172.7	171.2	171.6	-1.5	+0.4	-1.1
Alabama	150.0	146.5	151.0	-3.5	+5.1	+1.6
Arizona	175.1	170.8	167.3	-4.3	-3.5	-7.8
Arkansas	149.4	137.8	143.8	-11.6	+6.0	-5.6
California	178.3	178.7	177.5	+4	-1.2	-8
Colorado	180.0	178.2	179.9	-1.8	+1.7	-1
Connecticut	183.7	180.6	182.0	-3.1	+1.4	-7
Delaware	183.0	184.0	183.6	+1.0	-4	+6
District of Columbia	173.6	179.7	179.9	+6.1	+2	+6.3
Florida	154.4	167.5	163.5	+13.1	-4.0	+9.1
Georgia	148.0	137.4	136.0	-10.6	-1.4	-12.0
Idaho	162.6	168.3	163.9	+5.7	-4.4	+1.3
Illinois	188.4	188.3	178.9	-1	-9.4	-9.5
Indiana	173.4	157.8	171.2	-15.6	+13.4	-2.2
Iowa	175.9	176.2	176.1	+3	-1	+2
Kansas	168.8	172.0	165.7	+2.2	-6.3	-4.1
Kentucky	165.0	155.4	152.6	-9.6	-2.8	-12.4
Louisiana	151.0	156.1	158.4	+5.1	+2.3	+7.4
Maine	179.0	178.5	175.9	-5	-2.6	+3.1
Maryland	186.1	186.9	186.5	+8	-4	+4
Massachusetts	183.3	180.0	180.3	-3.3	+3	-3.0
Michigan	185.6	186.6	175.4	+1.0	-11.2	-10.2
Minnesota	180.1	179.3	177.4	-8	-1.9	-2.7
Mississippi	133.4	132.9	132.5	-5	-4	-9
Missouri	180.5	178.6	174.9	-1.9	-3.7	-5.6
Montana	173.5	173.0	181.8	-5	+8.8	+8.3
Nebraska	175.2	175.0	178.7	-2	+3.7	+3.5
Nevada	178.9	175.9	174.6	-3.0	-1.3	-4.4
New Hampshire	179.0	177.8	177.3	-1.2	-5	-1.7
New Jersey	188.4	183.1	187.1	-5.3	+4.0	-1.3
New Mexico	172.2	170.7	172.9	-1.5	+2.2	+7
New York	187.5	181.8	185.4	-5.7	+3.6	-2.1
North Carolina	154.3	154.4	159.3	+1	+4.9	+5.0
North Dakota	165.7	166.1	180.6	+4	+12.5	+12.9
Ohio	179.2	174.8	173.2	-4.4	-1.6	-6.0
Oklahoma	173.3	171.2	171.0	-2.1	-2	-3.3
Oregon	182.9	181.2	170.8	-21.7	+9.6	-12.1
Pennsylvania	181.2	181.2	180.8	0	-4	-4
Rhode Island	175.3	182.0	183.4	+6.7	-1.4	+8.1
South Carolina	147.0	144.3	146.7	-2.7	+2.4	-3
South Dakota	178.5	169.3	171.1	-9.2	+1.8	-7.4
Tennessee	163.2	150.7	163.3	-3.5	+3.6	+1
Texas	146.0	159.5	163.0	+13.5	+3.5	+17.0
Utah	172.5	164.4	171.5	-8.1	+7.1	-1.0
Vermont	172.1	174.6	171.4	+2.5	-3.2	-7
Virginia	164.1	168.2	170.5	+4.1	+2.3	+6.4
Washington	179.4	179.5	180.9	+1	+1.4	+1.5
West Virginia	165.7	164.3	174.4	-1.4	+10.1	+8.7
Wisconsin	179.2	179.6	177.7	+4	-1.9	-1.5
Wyoming	161.3	175.9	177.0	+14.6	+1.1	+15.7

That school terms in many rural communities were shortened is evident from data compiled by the Office of Education on the effects of the depression upon rural schools (table 14). It was found, however, that from 1929-30 to 1931-32 extreme cuts in the school term had not been general but had taken place only in certain localities. Some counties in Alabama had to cut in half terms which were already

short, and some counties in Arkansas had to reduce the term by about one-third; from four other States reports came of counties which had to cut school terms in excess of 20 percent.

TABLE 14.—CHANGES IN TERM LENGTH DURING THE PERIOD 1929-30 TO 1931-32, OF ELEMENTARY SCHOOLS UNDER THE SUPERVISION OF COUNTY AND OTHER SUPERINTENDENTS OF RURAL SCHOOLS, BY STATES

State	Number of counties reporting ¹	Average length of term in 1929-30	Decreases or increases in percent during period, 1929-30 to 1931-32		
			Highest decrease in any county	Average decrease for all counties reporting ²	Highest increase in any county
1	2	3	4	5	6
Continental United States	1,137	172	50.0	0.6	33.3
Alabama.....	11	151	50.0	17.7	3.5
Arizona.....	5	179	0.0	0.0	0.0
Arkansas.....	15	110	33.0	12.6	0.0
California.....	30	180	0.0	+0.3	6.0
Colorado.....	19	179	11.1	0.4	2.9
Connecticut.....	4	190	0.0	0.0	0.0
Florida.....	18	158	15.2	2.1	33.3
Georgia.....	15	160	16.7	0.0	12.5
Idaho.....	15	170	12.5	0.1	6.3
Illinois.....	43	163	2.3	+0.7	14.3
Indiana.....	46	161	5.6	0.2	0.0
Iowa.....	28	177	12.9	0.2	5.9
Kansas.....	31	165	3.0	0.1	0.0
Kentucky.....	40	153	12.5	0.2	14.3
Louisiana.....	17	177	1.3	+1.0	12.5
Maine.....	44	178	2.8	0.0	3.0
Maryland.....	11	186	2.7	+0.2	3.3
Massachusetts.....	46	188	2.6	0.1	0.5
Michigan.....	29	181	5.2	0.3	0.0
Minnesota.....	25	167	3.6	+0.3	5.0
Mississippi.....	13	148	12.5	10.4	0.0
Missouri.....	28	158	8.1	0.4	6.5
Montana.....	13	177	2.0	+0.2	5.9
Nebraska.....	34	179	12.5	0.1	4.1
Nevada.....	2	172	0.0	+3.5	3.5
New Hampshire.....	21	181	2.4	0.0	1.7
New Jersey.....	13	190	2.7	0.2	0.0
New Mexico.....	12	178	22.2	2.1	0.0
New York.....	72	189	0.0	+0.4	5.0
North Carolina.....	20	152	2.7	+1.0	12.1
North Dakota.....	13	169	8.6	0.8	1.9
Ohio.....	29	171	11.1	0.8	6.3
Oklahoma.....	22	164	12.5	1.9	14.3
Oregon.....	17	176	5.6	0.6	5.9
Pennsylvania.....	31	168	0.0	0.3	4.8
Rhode Island.....	3	187	0.0	+1.8	5.3
South Carolina.....	4	165	22.2	7.6	0.0
South Dakota.....	28	174	5.6	0.4	3.1
Tennessee.....	32	163	25.0	1.5	23.0
Texas.....	75	156	13.3	0.7	14.3
Utah.....	16	170	22.2	7.1	2.9
Vermont.....	38	175	2.9	+0.1	8.1
Virginia.....	25	173	11.1	1.8	6.7
Washington.....	21	178	8.1	0.3	6.1
West Virginia.....	23	162	1.8	0.1	0.6
Wisconsin.....	33	177	5.6	0.0	3.6
Wyoming.....	7	178	0.0	+0.5	3.5

¹ County, district, town, and other units of school administration.

² The plus sign indicates increases in term length.

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CHAPTER 6

CONT.

County school superintendents in 1,115 counties reported that in 1931-32 a total of 1,851 elementary schools and 482 high schools had closed early. Using the percentage of schools that closed early in 1931-32 and assuming that the data in table 11 are representative, it may be estimated that more than 8,000 rural schools in the United States were compelled to close their doors before the expiration of the regular school term.

County and other superintendents in rural schools in 15 States reported a total of 71 schools which for lack of funds were entirely closed without making provision for the education of the children concerned. Except in the case of Arkansas which reported 24 schools closed in a single county, most of the school communities reported to be unable to provide education for their children represented isolated cases. Chiefly these communities were in western areas of sparse population. Reports were also received indicating that in a few instances schools were being kept open on a tuition basis or through private subscriptions.

Data are not available to show the decrease in the length of school term from 1931-32 to 1932-33, but there was probably a greater decrease from 1932 to 1933 than from 1933 to 1934. That no great decrease in the length of the school term occurred from 1933 to 1934 may be accounted for by the fact that in 1933-34 the Federal Government through its emergency education program allotted \$14,536,010 to 32 States to keep their rural schools open for the usual school term. Data are not available to show how many days the emergency fund kept the schools open in each of the States receiving such funds. The 1933-34 report of the State department of Alabama, however, contains data showing the number of days the schools in that State ran on State and local funds and the number of days that they ran on Federal funds. The average number of days that the white schools ran on State and county funds was 124 and on Federal funds, 28; the Negro county schools ran 99 days on State and county funds and 27 days on Federal funds. In 42 of the 67 counties of the State the Federal funds kept the schools open for 40 or more days. It thus appears that if it had not been for Federal emergency relief funds to aid rural schools the average length of term in Alabama in 1933-34 in the white schools of the counties would have been only 124 days, and in the Negro schools only 99 days.

A rough estimate shows that without Federal funds the average length of school term in several other States in 1933-34 would have been about 20 days less than usual.

Table 15, which shows the amount of Federal emergency relief funds allotted to the States, indicates that without such funds the school term would have been less in 1933-34 than usual in those States receiving aid:

TABLE 15.—AMOUNT OF FUNDS ALLOTTED BY THE FEDERAL EMERGENCY RELIEF ADMINISTRATION FOR RURAL SCHOOL CONTINUATION, BY STATES, OCTOBER 1933 TO JUNE 1934

State	Amount	State	Amount
Alabama.....	\$1,976,519	Nebraska.....	\$80,057
Arizona.....	77,262	Nevada.....	15,863
Arkansas.....	685,200	New Hampshire.....	(1)
California.....	(1)	New Jersey.....	(1)
Colorado.....	48,540	New Mexico.....	272,217
Connecticut.....	(1)	New York.....	(1)
Delaware.....	(1)	North Carolina.....	500,000
Florida.....	626,935	North Dakota.....	334,908
Georgia.....	1,602,146	Ohio.....	(1)
Idaho.....	15,403	Oklahoma.....	1,162,147
Illinois.....	227,835	Oregon.....	105,386
Indiana.....	(1)	Pennsylvania.....	(1)
Iowa.....	8,354	Rhode Island.....	(1)
Kansas.....	(1)	South Carolina.....	341,855
Kentucky.....	337,552	South Dakota.....	192,044
Louisiana.....	981,531	Tennessee.....	556,344
Maine.....	(1)	Texas.....	519,170
Maryland.....	(1)	Utah.....	104,184
Massachusetts.....	(1)	Vermont.....	(1)
Michigan.....	91,434	Virginia.....	702,565
Minnesota.....	57,596	Washington.....	27,784
Mississippi.....	1,320,555	West Virginia.....	509,350
Missouri.....	535,399	Wisconsin.....	(1)
Montana.....	91,595	Wyoming.....	52,516

¹ No program in operation.

² No report received.

In the cities of the country the average length of school term decreased from 185 days in 1929-30 to 182 days in 1933-34. In cities having a population of 10,000 or more there was a decrease of 4 days, and in cities having a population of 80,000 to 99,999 there was an increase of 4 days; in cities having a population of 10,000 to 29,999 a decrease of 4 days; and in cities having a population from 2,500 to 9,999 a decrease of 3 days. In 36 cities having a population of 10,000 or more the school term was reduced 10 or more days. In 21 of the 36 cities the term was reduced, ranging from 10 days to 19 days; and in 15 cities, ranging from 20 to 30 days.

Chicago, Ill., and Akron and Dayton, Ohio, were among the large cities in which the school term was shortened by about 20 days.

Assuming that the same proportion of cities of less than 10,000 population reduced their school term 10 or more days, the total number of cities in which the school term was decreased 10 or more days from 1930 to 1934 was approximately 130.

SUPERVISORY AND TEACHING STAFF

Number.—During the depression period there was a great reduction in the number of supervisors, principals, and teachers. Comparative data for 26 States show that in these States the number of supervisors decreased from 5,807 in 1930 to 3,683 in 1934, a decrease of 36.5

percent. The great decrease was in the number of elementary principals. In 18 States reporting both in 1930 and in 1934 the number of elementary school principals dropped from 13,468 in 1930 to 8,070 in 1934. This was a loss of 5,398, or 48 percent, in these 18 States. The number of high-school principals in these States decreased from 8,010 to 6,507, or about 19 percent. For elementary and secondary schools combined the decrease in the number of principals amounted to 6,901, or 32 percent. The percentage decrease was probably about the same in the 30 States that did not report both in 1930 and 1934. This great reduction in the number of principals may be explained by the fact that many reported as principals in 1930 were later made head teachers or teaching principals so as to reduce expenses. In the public day schools of cities having a population of 2,500 or more there was from 1930 to 1934 a decrease of 16.3 percent in the number of supervisors and principals. Within the period the number of teachers per supervisor and principal increased from 17 to 20, or 17.6 percent, and the number of pupils per supervisor from 480 to 597, or 24 percent. Data for the period from 1930 to 1934 have not been compiled to show the decrease in the number of supervisors for each type of supervision, but, according to reports from about 1,100 cities, in 1932-33 the supervising staffs had by that time been greatly reduced (table 16).

TABLE 16.—ELIMINATIONS OR CURTAILMENTS IN SUPERVISORY STAFFS

Kind of supervision	Number of cities reporting eliminations	Number of cities reporting curtailments	Total number of cities reporting eliminations or curtailments
General.....	28	14	42
Art.....	59	24	83
Music.....	67	26	93
Physical education.....	23	16	39
Penmanship.....	32	4	36
Supervising principals.....	10	17	27

Not only were the supervisory staffs reduced but also the staffs for other specialized services (table 17).

TABLE 17.—ELIMINATIONS OR CURTAILMENTS OF STAFFS FOR RESEARCH, ATTENDANCE, AND HEALTH

Kind of service	Number of cities reporting eliminations	Number of cities reporting curtailments	Total number of cities reporting eliminations or curtailments
Research and testing.....	7	8	15
School attendance.....	19	6	25
Health:			
Medical.....	33	15	48
Dental.....	27	9	36
School nurse.....	46	22	68

One of the serious retrenchments comes under the head of health. While health is proclaimed, theoretically, as of first importance, the elimination of services which aim at the protection of children from infection and malnutrition indicates that we do not practice what we preach. From reports received by the Office of Education during the depression period, it is evident that there was more need for safeguarding the health of the child than ever before.

The reduction in the teaching staff for the country as a whole did not begin until between 1932 and 1934. From 1930 to 1932 the number of teaching positions increased from 842,601 to 863,348, or 2.5 percent, but during that time the number of pupils in average daily attendance increased 4.6 percent. There was thus a decrease in the number of teaching positions in relation to the number of pupils in average daily attendance. Applying the pupil-teacher ratio of 25.2 in 1930 to the number of pupils in average daily attendance in 1932, there should have been 882,752 teaching positions in 1932, or 19,404 more positions than in 1930. From 1932 to 1934 the number of teaching positions decreased from 863,348 to 836,210, or there were 27,138 fewer teachers in 1934 than in 1932, despite the fact that there were 212,846 more pupils in average daily attendance in 1934 than in 1932. If the same pupil-teacher ratio had prevailed in 1934 as in 1930 there should have been 891,198 teaching positions in 1934, or there should have been 54,988 more positions in 1934 than there actually were that year.

In the cities having a population of 2,500 or more the number of pupils in average daily attendance per teacher was 28.3 in 1930 and in the rural areas 22.6. If the same pupil-teacher ratios had been maintained in 1934 as in 1930, about 34,367 more teachers would have been needed in the cities and about 20,621 more would have been needed in the rural districts than were employed in 1934.

In 45 States the number of pupils in average daily attendance in relation to the number of teaching positions was greater in 1934 than in 1930, as indicated by the percentage decrease or increase in the

number of teaching positions and in the number of pupils in average daily attendance (table 18).

TABLE 18.—PERCENTAGE OF INCREASE OR DECREASE IN TEACHING POSITIONS AND IN NUMBER OF PUPILS IN AVERAGE DAILY ATTENDANCE, 1930 TO 1934 AND 1932 TO 1934, BY STATES

State	Percent decrease or increase			
	Teaching positions		Average daily attendance	
	1930 to 1934	1932 to 1934	1930 to 1934	1932 to 1934
1	2	3	4	5
Continental United States	-0.8	-3.1	+5.6	+1.0
Alabama.....	+6	-2	+7.2	-2
Arizona.....	-10.4	-18.0	+9	-5.3
Arkansas.....	-6.1	+1.0	+4.9	+2.4
California.....	+6.6	+5	+8.1	+1.5
Colorado.....	-10.0	-10.7	+3.0	-1.4
Connecticut.....	-2.3	-2.3	+4.0	+1
Delaware.....	+11.5	+4.1	+9.6	+2.4
District of Columbia.....	+2.6	+1.5	+11.8	+4.0
Florida.....	+1.8	-2.3	+11.2	+2.4
Georgia.....	+5.1	+2.6	+9.5	+3.0
Idaho.....	-3.1	-5.4	+5.5	+1.9
Illinois.....	-5.5	-4.9	-2.4	-4.3
Indiana.....	-7.5	-6.0	+9.5	+6
Iowa.....	-2.5	-3.4	+2.1	-7
Kansas.....	-10.5	-10.4	+8	-4.2
Kentucky.....	+8.4	+1.1	+9.0	+1.8
Louisiana.....	+2.7	+4	+9.2	+3.1
Maine.....	-1.2	-3.2	+8.5	+2.5
Maryland.....	-2.8	-3.7	+7.1	+1.1
Massachusetts.....	+2.6	-2.1	+3.5	+1
Michigan.....	-6.7	-9.2	+5.4	+2.7
Minnesota.....	-6.7	-1.8	+5.0	+1.0
Mississippi.....	-9.7	-12.0	+3.8	+5.4
Missouri.....		-1.6	+6.1	+1.6
Montana.....	-6.4	-5.4	+5	-1.8
Nebraska.....	-6.1	-6.1	+7.0	-1.6
Nevada.....	+7.2	-4.8	+9.1	-4
New Hampshire.....	-3.1	-3.5	+4.4	+4
New Jersey.....	+2.0	-2.6	+5.6	+1.2
New Mexico.....	-6.7	-3.2	+15.3	+5.1
New York.....	+4.7	-1.2	+7.9	+2.9
North Carolina.....	+3.9	-1	+12.5	+3.9
North Dakota.....	-2.8	+3.0	-8.7	-6.2
Ohio.....	-2.4	-4.6	+4.3	+1.0
Oklahoma.....	-6.4	+2.1	+4.7	-2
Oregon.....	+23.3	-2.8	+9.1	-14.2
Pennsylvania.....	-1.0	-3.5	+6.7	+2.2
Rhode Island.....	+1.6	-1.7	+5.5	+2.1
South Carolina.....	-3.3	-8	+8.7	+1.4
South Dakota.....	-4.7	-2.6	-1.6	-8
Tennessee.....	+5.8	-7	+6.1	+1.7
Texas.....	+17.0	+1		+1.5
Utah.....	-10.0	-2.7	+5.5	-1
Vermont.....	-1.8	-3.2	+1.0	+6
Virginia.....	-4	-1.8	+7.6	+9
Washington.....	-7.6	-6.8	+1.9	-1.4
West Virginia.....	-14.7	-17.6	+7.6	+2.5
Wisconsin.....	+8	-1.7	+9.1	+1.2
Wyoming.....	-13.1	-6.6	-1.2	-1.1

In the rural schools there was a decrease of 1 percent in the teaching staff from 1929-30 to 1932-33, according to data compiled from reports submitted by 1,129 county and other superintendents in rural areas. The highest decrease in any county reporting was 61.9 percent. In nearly every State there was a decrease (table 19).

TABLE 19.—CHANGES IN PERCENT IN THE NUMBER OF TEACHERS EMPLOYED DURING THE PERIOD, 1929-30 TO 1932-33, IN THE SCHOOLS UNDER THE SUPERVISION OF COUNTY AND OTHER SUPERINTENDENTS OF RURAL SCHOOLS, BY STATES

State	Number of counties reporting ²	Total teachers employed in these counties, 1929-30	Average decrease for the 3-year period in all counties reporting ¹			Highest decrease in elementary staff of any county	Highest increase in elementary staff of any county
			In total teaching staff	In secondary staff	In elementary staff		
1	2	3	4	5	6	7	8
Continental United States.....	1,129	156,962	1.0	+2.4	2.2	61.9	215.8
Alabama.....	12	2,293	3.8	5.2	3.0	17.5	10.7
Arizona.....	5	888	23.3	19.1	24.4	46.2	2.7
Arkansas.....	15	1,928	7.7	+2.2	10.3	33.0	0.0
California.....	28	9,120	+2.3	+4.1	+1.3	11.6	11.4
Colorado.....	16	1,767	2.9	6.1	1.8	24.0	7.9
Connecticut.....	4	350	1.1	2.8	1.0	5.6	3.2
Florida.....	18	1,316	2.3	+7.9	7.2	40.0	50.0
Georgia.....	15	1,381	.2	3.2	+ .8	17.6	11.1
Idaho.....	15	1,257	5.8	4.8	6.2	23.8	2.3
Illinois.....	41	11,471	1.7	.1	2.2	8.9	2.7
Indiana.....	46	5,865	5.0	3.7	5.7	19.6	4.5
Iowa.....	28	5,391	3.3	3.6	3.2	10.8	2.1
Kansas.....	31	4,282	1.9	2.3	1.7	14.3	14.7
Kentucky.....	40	3,351	+3.4	+28.0	+ .6	31.0	18.8
Louisiana.....	17	3,201	+ .7	+3.7	.3	21.2	25.0
Maine.....	43	1,897	.1	+5.8	1.6	20.0	36.9
Maryland.....	11	1,505	3.1	+8.4	8.1	25.9	0.0
Massachusetts.....	46	1,971	.4	+3.9	1.9	17.0	12.5
Michigan.....	29	3,804	2.3	1.5	2.5	15.3	7.6
Minnesota.....	25	3,416	2.1	0	2.5	21.7	7.0
Mississippi.....	13	1,063	2.7	.8	3.7	20.6	1.6
Missouri.....	28	3,581	.6	.8	.5	7.6	6.0
Montana.....	13	1,062	2.5	+11.5	5.6	61.9	10.0
Nebraska.....	34	4,100	2.9	4.2	2.4	16.7	6.9
Nevada.....	2	279	.4	+5.0	2.5	17.8	8.7
New Hampshire.....	21	781	.9	+5.6	3.2	16.7	20.8
New Jersey.....	13	8,860	+1.0	+10.9	1.4	11.1	8.5
New Mexico.....	12	707	+2.8	+8.6	+1.7	14.3	38.6
New York.....	72	6,984	+4.1	+11.6	+1.9	31.4	18.6
North Carolina.....	20	2,068	7.1	.7	8.9	35.5	6.6
North Dakota.....	13	1,672	2.7	.3	3.3	15.3	13.0
Ohio.....	29	5,854	.5	+1.2	1.4	18.1	65.7
Oklahoma.....	22	2,856	3.3	9.9	2.7	22.2	8.8
Oregon.....	16	2,890	+ .6	+7.4	1.9	24.2	26.9
Pennsylvania.....	31	12,423	+2.2	+15.0	1.4	20.4	4.4
Rhode Island.....	3	28	+10.7	+100.0	0	12.6	33.3
South Carolina.....	4	806	.9	+2.3	1.7	7.0	1.2
South Dakota.....	28	2,914	2.6	6.4	1.8	18.3	4.9
Tennessee.....	32	4,526	+2.1	+4.2	+1.7	17.4	22.7
Texas.....	75	5,123	1.2	1.9	1.0	31.0	215.8
Utah.....	16	1,415	9.3	4.8	12.2	43.0	0
Vermont.....	38	1,312	1.8	+1.0	2.3	30.0	25.0
Virginia.....	25	2,574	3.8	+ .7	5.2	31.7	7.1
Washington.....	21	5,167	5.9	3.2	6.8	23.7	9.1
West Virginia.....	23	5,411	+ .7	+9.0	1.1	13.6	21.1
Wisconsin.....	33	5,322	+ .4	+2.1	+ .1	6.9	4.1
Wyoming.....	7	750	5.7	4.8	6.0	10.3	1.4

¹ The plus sign indicates increases.

² County, district, or other units of school administration.

³ This extraordinarily high increase³ found in Gregg County, Tex., and is explained by oil developments.

Salaries.—Since salaries of teachers constitute about 75 percent of the current expense item, no great reduction in current expenses is possible without a reduction in salaries. In several States the average reduction in the salaries of teachers, principals, and supervisors from 1930 to 1934 amounted to as much as 30 percent (table 20). For the entire country the average decrease in salaries within the 4-year period was 13.6 percent. In only one State, Rhode Island, was the average salary greater in 1934 than in 1930; but from 1932 to 1934 there was a decrease in every State.

TABLE 20.—AVERAGE ANNUAL SALARIES OF TEACHERS, SUPERVISORS, AND PRINCIPALS, 1929-30 AND 1933-34, AND PERCENTAGE CHANGE, BY STATES

State	Average annual salaries		Percentage change
	1930	1934	
1	2	3	4
Continental United States	\$1,420	\$1,227	-13.6
Alabama.....	792	625	-21.1
Arizona.....	1,637	1,309	-20.0
Arkansas.....	673	465	-30.9
California.....	2,123	1,899	-10.7
Colorado.....	1,453	1,172	-19.3
Connecticut.....	1,812	1,607	-11.3
Delaware.....	1,570	1,461	-5.5
District of Columbia.....	2,269	2,004	-11.7
Florida.....	876	806	-8.0
Georgia.....	684	640	-6.4
Idaho.....	1,200	794	-33.8
Illinois.....	1,630	1,397	-14.3
Indiana.....	1,466	1,127	-23.1
Iowa.....	1,094	834	-23.8
Kansas.....	1,159	858	-26.0
Kentucky.....	896	676	-24.6
Louisiana.....	941	725	-23.0
Maine.....	942	803	-14.8
Maryland.....	1,518	1,409	-7.2
Massachusetts.....	1,875	1,730	-7.7
Michigan.....	1,534	1,162	-24.3
Minnesota.....	1,251	1,006	-19.6
Mississippi.....	620	474	-23.5
Missouri.....	1,235	1,175	-4.9
Montana.....	1,215	957	-21.2
Nebraska.....	1,077	749	-30.5
Nevada.....	1,483	1,317	-11.2
New Hampshire.....	1,254	1,182	-5.7
New Jersey.....	2,113	1,873	-11.4
New Mexico.....	1,113	994	-10.7
New York.....	2,493	2,361	-5.3
North Carolina.....	873	576	-34.0
North Dakota.....	900	621	-31.0
Ohio.....	1,665	1,420	-14.7
Oklahoma.....	1,072	815	-24.0
Oregon.....	1,612	921	-42.9
Pennsylvania.....	1,620	1,531	-5.5
Rhode Island.....	1,437	1,509	+5.01
South Carolina.....	788	599	-24.0
South Dakota.....	956	614	-35.8
Tennessee.....	902	725	-19.6
Texas.....	924	849	-8.1
Utah.....	1,330	1,094	-17.7
Vermont.....	963	770	-20.0
Virginia.....	861	779	-9.5
Washington.....	1,556	1,217	-21.8
West Virginia.....	1,023	913	-10.8
Wisconsin.....	1,399	1,211	-13.4
Wyoming.....	1,239	967	-22.0

Data to show the decrease in teachers' salaries by school levels for the entire country and for each State are not available. The Research Division of the National Education Association has, however, compiled data showing the median salaries paid city teachers at each school level in 1930-31 and 1934-35. The percentage decrease based on these medians is given in table 21.

TABLE 21.—PERCENTAGE DECREASE IN MEDIAN SALARIES OF CITY SCHOOL TEACHERS, 1930-31 TO 1934-35, BY TYPE OF SCHOOL AND POPULATION GROUPS

Type of school	Population group				
	More than 100,000	30,000 to 100,000	10,000 to 30,000	5,000 to 10,000	2,500 to 5,000
1	2	3	4	5	6
Elementary.....	9.25	12.24	13.50	19.42	17.30
Junior high.....	11.50	13.33	14.14	19.14	17.28
High school.....	10.80	13.12	14.55	18.50	18.55

According to data compiled by the Office of Education for 1930 and 1935, the median salary of teachers in one-room schools decreased from \$788 in 1930 to \$517 in 1935, or 34.4 percent; and the median salary of teachers in two-room schools from \$829 in 1930 to \$620 in 1935, or 25.2 percent; in three- or more-teacher schools in the open country from \$1,017 in 1930 to \$809 in 1935, or 20.5 percent; and in three- or more-teacher schools in villages from \$1,157 in 1930 to \$960 in 1935, or 17 percent.

The foregoing figures do not tell the entire story of reductions in teachers' salaries since in some school districts teachers returned 5 or 10 percent of their salaries to the board of education. In many instances funds were not available for payment of salaries of teachers when due; consequently, payments were deferred for long periods of time or large discounts were necessary. The withholding of the annual increments provided for in many salary schedules should also be taken into consideration. Many teachers who began in 1930 at a minimum salary expected an increase of about \$100 a year for 8 or 10 years, but early in the depression period annual increments were not allowed. A teacher at a salary of \$1,200 a year in 1930 would have received \$1,300 in 1931. Without the increment, her salary was 7.7 percent less than that provided by the salary schedule. If in addition there was a reduction of 10 percent in the basic salary, she received \$1,080 a year; or 16.9 percent less than the amount she would have normally received.

Not only were the salaries of teachers reduced, but also the salaries of administrative and supervisory officers (table 22). The percentage

reduction in the median salaries of such officers was greater than the reduction in teachers' salaries, especially in cities having a population of more than 100,000.

TABLE 22.—PERCENTAGE REDUCTION IN MEDIAN SALARIES PAID ADMINISTRATIVE AND SUPERVISORY OFFICERS, 1930-31 TO 1934-35¹

Administrative and supervisory officials	Population groups				
	More than 100,000	30,000 to 100,000	10,000 to 30,000	5,000 to 10,000	2,500 to 5,000
1	2	3	4	5	6
Superintendents.....	27.7	18.4	17.6	17.9	20.1
Elementary school principals:					
Supervising.....	14.3	10.7	9.8	12.4	6.3
Teaching.....	12.3	13.5	15.3	21.3	16.1
Junior high school principals.....	17.4	14.0	16.5	23.6	19.3
High-school principals.....	16.7	15.1	16.7	20.9	23.0
Supervisors or directors:					
Primary grades.....	18.3	17.9			
Intermediate grades.....	18.6	19.0	10.8		
Art.....	16.1	10.7	10.2	16.7	
Music.....	18.0	18.5	12.6	18.8	
Health.....	21.1	2.8	2.4	26.5	23.1
Physical education.....	15.0	14.8	6.4	22.3	12.2
Home economics.....	15.3	15.2	10.4	20.4	17.9
Vocational education.....	28.8	18.2	19.4	22.4	

¹ Based upon data compiled by the Research Division of the National Education Association.

Qualifications.—Not many data are available to show the effect of the depression upon the qualifications of teachers, but according to data covering the period 1929-30 to 1932-33, teachers with lower qualifications than formerly were being employed in 7.4 percent of 1,117 counties reporting; teachers with higher qualifications were being employed in 27.6 percent of these counties; and 65 percent with the same qualifications as before the depression period were being employed. In 21 States none of the counties reporting were employing teachers with lower qualifications.

The employment of teachers with comparatively low qualifications in some of the school districts was doubtless due to the fact that only teachers residing in the district were given teaching positions. Naturally, if there were in the district no unemployed teachers holding high-grade certificates, those with low-grade certificates were employed.

On the whole, however, it appears that the tendency has been to employ teachers with higher qualifications than in 1930. According to data compiled by the Office of Education only 23.3 percent of the teachers in one-teacher schools and 36.4 percent of the teachers in two-teacher schools in 1930 had had 2 or more years of normal school work, while in 1935, 42.1 percent of the teachers in one-teacher schools and 60.1 percent of the teachers in two-teacher schools had completed 2 or more years of normal school work.

Educational legislation during the depression which affected the certification and training of teachers reveals two interesting aspects: (1) a tendency to increase entrance standards to the teaching profession, and (2) a temporary suspension of laws in many States which required teachers already in the service to complete additional professional training as a prerequisite to renewal or extension of the validity of their certificates.

Among the States which increased the requirements for initial entrance to the teaching profession are Iowa, Kentucky, Maine, Maryland, Michigan, Montana, and West Virginia. In this connection it may be noted that Kentucky, Michigan, North Carolina, and West Virginia increased the requirement of county superintendents of schools. Legislation which provided for the renewal or extension of teachers' certificates without additional training was enacted in many States. Among some of these States are Alabama, Arkansas, Colorado, Kansas, Kentucky, New York (applicable to New York City), Nevada, New Mexico, North Carolina, South Carolina, and Wyoming.

INSTRUCTIONAL SERVICES

One of the most serious effects of the depression upon about 20 percent of the city schools of the country was the elimination or curtailment of instruction in various fields, as music, art, and physical education. The subjects eliminated are the ones upon which increased emphasis was greatly needed. Some few cities did, however, increase their programs in one or more of the subjects listed in table 23.

Why music, art, physical education, and several other subjects were eliminated as an economy measure cannot well be explained, since most of the subjects eliminated are the least expensive ones in the curriculum. The classes in these subjects are usually larger than in other subjects, thereby making the cost per pupil-recitation less.

The eliminations were, however, probably largely due to the fact that many persons thinking of the schools only in terms of the three R's of their own school days raised the cry that music, art, and other comparatively new subjects are "fads and frills." If retrenchments had to be made in the field of instruction the old subjects should have been weighed along with the new in order to compare their relative worth.

As shown in table 23 about 80 percent of all the cities reporting maintained their programs of art, physical education, homemaking, and industrial arts, and that only 77 percent of the cities maintained their music program as it was in 1929-30. Variations among the groups show that the cities having a population of 30,000 to 100,000 rank highest in maintaining their former programs of art, music, physical education, and homemaking. Eliminations and curtail-

ments in art, music, and physical education were most common in cities from 10,000 to 30,000 population, but this group did more to maintain its industrial arts program than did the cities of the other population groups.

Data to show what eliminations and curtailments took place in the field of instruction in the rural schools are not available. The programs of many rural schools, however, were so meager that they did not admit of eliminations or curtailments.

TABLE 23.—NUMBER AND PERCENTAGE OF CITIES (BY GROUPS MAINTAINING, INCREASING, REDUCING, OR ELIMINATING CERTAIN INSTRUCTIONAL SERVICES BETWEEN SEPTEMBER 1930 AND JUNE 1933

Subject of instruction by group of cities	Number of replies	Maintained		Increased		Reduced		Eliminated	
		Number of cities	Percent of cities reporting	Number of cities	Percent of cities reporting	Number of cities	Percent of cities reporting	Number of cities	Percent of cities reporting
1	2	3	4	5	6	7	8	9	10
Art.....	632	517	81.8	12	2.0	67	10.6	36	5.6
Group I.....	36	30	83.3			6	16.7		
Group II.....	90	84	93.3	1	1.0	5	5.5		
Group III.....	206	163	79.1	6	2.9	27	13.1	10	4.9
Group IV.....	300	240	80.0	5	1.6	29	9.7	26	8.7
Music.....	722	555	76.9	28	3.9	110	15.2	29	4.0
Group I.....	36	29	80.6			7	19.4		
Group II.....	90	75	83.3	1	1.1	14	15.6		
Group III.....	218	161	73.9	14	6.4	35	16.0	8	3.7
Group IV.....	378	290	76.7	13	3.4	54	14.3	21	5.6
Physical education.....	696	565	81.2	22	3.2	81	11.6	28	4.0
Group I.....	36	29	80.6			7	19.4		
Group II.....	88	77	87.5	3	3.4	8	9.1		
Group III.....	211	160	75.8	9	4.3	35	16.6	7	3.3
Group IV.....	361	299	82.8	10	2.8	31	8.6	21	5.8
Homemaking.....	654	549	84.0	21	3.2	65	9.9	19	2.9
Group I.....	35	27	77.1			8	22.9		
Group II.....	85	74	87.1	1	1.2	7	8.2	3	3.5
Group III.....	204	167	81.9	11	5.4	20	9.8	6	2.9
Group IV.....	330	281	85.2	9	2.7	30	9.1	10	3.0
Industrial art.....	630	528	83.8	20	3.2	58	9.2	24	3.8
Group I.....	35	26	74.3			9	25.7		
Group II.....	85	70	82.3	1	1.2	9	10.6	5	5.9
Group III.....	198	169	85.3	10	5.1	11	5.5	8	4.1
Group IV.....	312	263	84.3	9	2.9	29	9.3	11	3.5

TEXTBOOKS AND SUPPLIES

Reports from 42 publishers for the years 1930-31 and 1931-32 show a drop of sales of school and college books from \$32,683,206 in 1930-31 to \$27,197,129 in 1931-32. The sales decreased \$5,487,177, or 16.8 percent in 1 year. This decrease, however, was due partly to a decrease in the average cost of elementary and secondary school textbooks.

from 50.5 cents to 46.2 cents, but chiefly to the fact that there were 14.4 percent fewer books sold. According to the reports of 42 publishers, the sales of books for the various school levels was affected differently during the year: 12.6 percent fewer elementary school textbooks were sold, 31.2 fewer junior high school textbooks, and 20.7 percent fewer senior and 4-year high school textbooks.

A comparison of the amount spent for textbooks in 1929-30 with the amount spent in 1933-34 as reported by the State Departments of Education in 18 of the States in which elementary and high-school books are required to be furnished free shows that during the 4-year period there was a decrease of 35.5 percent in these States.

Data showing the amount spent for textbooks and educational supplies were compiled by the Office of Education in 1930 and 1934 for cities having a population of 10,000 or more. During the 4 years the amount spent for textbooks and educational supplies decreased from \$34,884,364 in 1930 to \$24,328,170 in 1934, which was a decrease of \$10,556,394, or about 30 percent. In cities having a population of 100,000 or more, the decrease was 32 percent; in cities having a population from 30,000 to 100,000, 44 percent; and in cities having a population from 10,000 to 30,000, 35 percent. In the three groups combined the reduction in the amount spent for textbooks and educational supplies for elementary schools was 37 percent, for junior high schools 34 percent, and for senior and 4-year high schools 23.2 percent. It thus appears from these data that the elementary schools suffered the greatest reduction in supplies and textbooks.

It is obvious that in general worn-out texts were not replaced and that new textbooks were not purchased. Several school survey reports show that because of a shortage of books or because those available were not modern it was difficult for the schools to put new curricula into operation. One State survey shows that about one-third of the pupils did not have the required number of textbooks and that about 12 percent did not have as many as one-half the required number. In that particular State parent-teacher and other organizations were furnishing textbooks to hundreds of school children. In a city school survey report the elementary school textbooks are described as ill-adapted to meet individual differences in child needs, interests, and abilities and too old and out of date to serve instructional needs. The average date of the history books was 1924; a few were dated before the World War. The geography texts were also old. The situation in the high schools was about the same.

Judging from the great decrease in the amount spent for textbooks between 1930 and 1934 the foregoing illustrations may be considered typical.

SCHOOLS AND CLASSES FOR SPECIAL PURPOSES

Schools and classes for exceptional children.—Since data showing the number of school systems maintaining schools and classes for exceptional children and the number enrolled are incomplete for 1929-30, comparisons to show what the effect of the depression was upon such classes are made between statistics for 1931-32 and 1933-34.

These statistics show not a decrease but a substantial increase in the total number of exceptional children enrolled in special classes. In the 2-year period from 1931-32 to 1933-34 the increase in enrollment was more than 40,000, and it applies to each of the eight groups of exceptional children except one; children of lowered vitality, or delicate children, who were reported as segregated in so-called open-air or similar classes were fewer in 1934 than in 1932 by about 1,000.

Turning from a consideration of the number of pupils reached to the number of cities reaching them, the picture is not quite so encouraging nor so consistent. The number of cities reporting provisions for crippled children (including home instruction for those unable to attend school) rose from 195 in 1932 to 229 in 1934, while the number reporting classes for mentally retarded children dropped from 515 to 427 during the same period. The largest losses in this latter case were among the small towns which found it difficult to maintain one or two classes of light enrollment. On the other hand, there were those that succeeded in preserving at least one special group in the system by increasing the size of class.

Varying changes took place among other groups. Additions occurred in the number of cities reporting special classes for the blind or partially seeing and the speech-defective, but losses appeared for the gifted, the delicate, the deaf and hard-of-hearing, and the socially maladjusted. The last-named group is, however, coming more and more to the attention of child guidance clinics, which are considered by mental hygienists with much greater favor than are segregated classes in the school system.

The apparent contradiction implied by the increase in the number of children reported as enrolled in special classes and the decrease in the number of cities reporting the maintenance of such classes may be explained by the fact that the program has been substantially enlarged in a number of cities. From Baltimore, for example, came the report in 1934 of an enrollment in special classes for the mentally retarded which was greater than that reported in 1932 by more than 1,000 pupils. Similarly, Philadelphia changed its report for the same group from 8,663 in 1932 to 9,230. Some smaller cities show the same development, not necessarily by adding to the number of teachers, but by increasing the size of classes, sometimes to an unfortunate extent.

In each of 13 State departments of education there is a division which is responsible for the development and supervision of a State-wide program for one or more types of exceptional children. What has happened in some of these States will be of interest in determining the general effect of the depression upon provisions made for handicapped children.

In Ohio nine new classes were opened for the deaf and seven for sight-defective children. In Michigan an enrollment of 2,701 pupils in all special classes in 1930 increased to 3,360 pupils in 1935. A total of 89 special classes increased to 93 classes, or there were only 4 more classes for 659 more pupils. Obviously the size of classes must have grown in Michigan as elsewhere to take care of the additional enrollment.

In Wisconsin, which can also lay claim to a progressive program of special education, there has, unfortunately, been a definite backward step. The legislature of 1933 repealed the law of 1927 granting State aid for classes of mentally deficient children. With assistance cut off, the burden has been much heavier for local communities. They have thus far succeeded in holding the program steady with relatively few losses. In fact the number of children reached was greater by almost 300 in 1934 than in 1930—again the result of larger rather than more classes.

Established State subsidies for crippled, deaf, blind, and speech-defective children in Wisconsin have been retained, and the work in these fields shows varying amounts of gain since 1930.

In Pennsylvania the situation for the mentally retarded is encouraging. From 1930 to 1934 the number of "orthogenic backward" classes increased from 560 to 586. Orthopedic, sight-saving classes, speech-correction groups, and classes for delicate children had held their own or increased in number during the same period, while disciplinary groups and classes for deaf and hard-of-hearing children show a slight increase.

Massachusetts, too, gives consistent attention to mentally retarded pupils; moreover, even back in 1930 that State began an active campaign for crippled children which resulted in the development of educational facilities for this group during the succeeding years.

The foregoing summary regarding special schools and classes for exceptional children indicates that this phase of educational endeavor weathered the storm of the depression to a gratifying degree.

Summer schools.—In 1930, 374 cities having a population of 2,500 or more reported summer schools. In 1934, only 160 cities reported such schools, which represents a decrease of 57.2 percent. Within the 4-year period the enrollments dropped from 492,638 in 1930 to 109,844 in 1934, or 77.7 percent. The number of teachers dropped from 14,481 in 1930 to 8,317 in 1934, or 77 percent; and the total

expenditures from \$4,043,433 in 1930 to \$602,363 in 1934, or 85.1 percent. The number of summer schools was reduced not because their value had not been demonstrated, but because the elimination of such schools offered a partial solution to budget balancing.

Before the beginning of the depression there was every indication that more cities would organize summer schools, judging by the increase in the growth of such schools from 1920 to 1930.

Evening schools.—The number of cities maintaining evening schools and the number of pupils decreased greatly from 1930 to 1934. In 1930, 664 cities maintained evening schools; in 1934, only 38 cities maintained such schools. The enrollments decreased from 1,038,052 in 1930 to 811,882 in 1934; the number of supervisors and teachers from 24,071 to 16,524; and expenditures decreased from \$10,682,349 to \$6,469,485. Expressed in percentages the number of cities maintaining evening schools decreased 42.5 percent within the 4-year period; the enrollments, 21.8 percent; the supervising and teaching staff, 31.4 percent; and the amount expended for evening schools 39.4 percent.

Evening schools were eliminated for the same reason as summer schools; namely, to help reduce expenses and to help balance the school budget. The reduction in the number of regular evening schools was, however, compensated for to a certain extent by the organization of adult classes which were made possible by the Federal Emergency Relief Administration, this Administration providing funds with which to employ instructors for classes composed of adults.

Nursery schools and kindergartens.—During the economic depression school opportunities for children below first grade decreased in the tax-supported schools and increased through the projects of the Federal Emergency Relief Administration. On the one hand, kindergartens in public schools for children 4 and 5 years old, which had been introduced in public-school systems at the long and earnest solicitation of parents who realized that such schools had an educational value for their children, were entirely eliminated in some cities, and in others the work was greatly curtailed. On the other hand, children from 2 to 5 years of age of needy and unemployed parents were enrolled for the first time in emergency nursery schools. These schools were organized to give employment to needy and unemployed teachers and to help counteract the negative influences of the home, incident to economic and social difficulties, upon the children's physical and emotional stability.

Kindergarten curtailments.—Data are not available to show the exact number of cities that eliminated kindergartens nor the number that curtailed their kindergarten programs. However, a study of conditions in city schools during the period 1931 to 1934 shows that of 797 city school systems reporting, 426 provided kindergartens in 1931-

32, 404 in 1932-33, and 377 in 1933-34. Thus 49, or 11.5 percent, of the 426 cities reporting on their conditions and which maintained kindergartens in 1931-32, eliminated them within the 2-year period. The total number of cities which maintained kindergartens in 1931-32 was 1,197. Therefore, if the same percentage of decrease occurred in these 1,197 cities as in the 426 cities, there were approximately 127 fewer cities maintaining such schools in 1933-34 than in 1931-32.

These eliminations and curtailments were not only made possible, but were facilitated in many cities because of the laws and regulations controlling the sources of financial support upon which these schools depend. In nearly all of the States the laws relating to kindergartens are the only specified provision for pregrade education in the public-school systems and the source of financial support for kindergartens in about half of the States lies in special local tax levies which in recent years have been difficult to maintain.

Curtailments were also effected in kindergarten programs by raising the age of entrance. In 42 of 337 cities reporting in September 1933, the entrance age had been raised. In 23 of these cities the entrance age was increased one-half a year, in 9 cities three-fourths of a year, and in 10 cities 1 year.

From 1930 to 1934 the total number of children enrolled in kindergartens decreased from 723,443 to 601,777, or 17 percent. In cities having a population of 10,000 or more the cost per kindergarten pupil decreased from \$54.93 in 1930 to \$47.01 in 1934, or 14.4 percent; and the number of pupils enrolled per teacher increased from 56.5 to 59 within the 4-year period.

Development of the emergency program for young children.—With the inauguration of the emergency nursery school program in October 1933, between 50,000 and 75,000 young children have been enrolled each year and their parents have participated in the general education program connected with the project.

The emergency nursery school program helped to converge the interests of professional, religious, civic, and welfare organizations upon the needs of young children. Previous to the establishment of emergency nursery schools demonstrations of child development programs were carried on in a few high schools for the benefit of high-school boys and girls. Through the emergency nursery school many additional demonstration centers have been provided. The way has also been opened for the active participation of high-school boys and girls in the daily program with young children through the allowances offered by the National Youth Administration. It will be interesting to note the effect that the emergency nursery schools will have upon the future nursery-school offerings in public-school systems and upon the types of daily programs carried on in kindergartens.

Vocational schools and classes.—The data contained in this section are confined to vocational schools and classes operating under State plans, including those Federally and those non-Federally aided. Table 24 compiled from data presented in a publication of the Office of Education² giving enrollments in and expenditures for vocational schools by years from 1918 to 1936 shows how such schools were affected as to enrollments and expenditures from 1930 to 1934.

Between 1930 and 1934, the number of pupils enrolled in vocational agricultural schools and classes and in vocational home economics increased, while the expenditures for each of these types of schools decreased (table 24). In the trade and industrial schools and classes, not including part-time general continuation schools and classes, both enrollments and expenditures increased; the percentage increase in expenditure was, however, greater than the percentage increase in enrollments. The part-time general continuation schools and classes show a great decrease both in expenditures and in the number of pupils enrolled. The heavy decrease in enrollments in such schools was due to the fact that very few persons between the ages of 14 and 18 years of age were able to secure employment during the depression, and consequently most of them returned to some form of full-time school

TABLE 24.—ENROLLMENTS IN AND EXPENDITURES FOR VOCATIONAL SCHOOLS, FEDERALLY AND NONFEDERALLY AIDED, 1930, 1932, AND 1934, AND PERCENTAGE INCREASE OR DECREASE

Types of vocational schools and classes, by year	Expenditures				Enrollments			
	Total	Percentage increase or decrease			Total	Percentage increase or decrease		
		1930 to 1932	1932 to 1934	1930 to 1934		1930 to 1932	1932 to 1934	1930 to 1934
1	2	3	4	5	6	7	8	9
Agricultural schools:								
1930.....	\$8,743,382	+16.8	-18.4	-4.7	193,325	+33.1	+12.5	+49.7
1932.....	10,212,810				257,255			
1934.....	8,333,669				289,361			
Trade and industrial, not including continuation:								
1930.....	8,314,566	+14.1	+4.3	+19.0	296,658	+3.4	+3	+4.1
1932.....	10,058,107				308,088			
1934.....	10,491,667				308,930			
Part-time general continuation:								
1930.....	5,465,513	-1.8	-46.8	-47.8	336,495	-19.3	-24.8	-47.4
1932.....	5,367,616				271,503			
1934.....	2,855,024				177,128			
Home economics:								
1930.....	4,382,036	+17.0	-15.5	-1.1	238,068	+42.5	+13.0	+44.4
1932.....	5,129,039				339,316			
1934.....	4,331,977				343,721			

² Digest of annual reports of State boards for vocational education to the Office of Education. Division of Vocational Education, fiscal year ended June 30, 1936.

ENROLLMENTS

While school budgets and the teaching staff were being reduced the number of pupils was increasing. Just what effect the depression had on enrollments is difficult to estimate. It probably had no effect on enrollments in the elementary school grades, with the exception of the kindergarten, in which the enrollment decreased 16.8 percent between 1930 and 1934 due to the elimination of kindergartens or to the raising of the kindergarten entrance age in some of the school systems. All the other elementary school grades, except the sixth, seventh, and eighth, registered a decrease which may be explained by the falling birth rate.

The number of pupils enrolled in high school increased 28.9 percent from 1930 to 1934. Of special significance is the increase in the number enrolled in the last 2 years of high school and the increase in the number of postgraduate students. From 1930 to 1934 the number enrolled in the third-year high-school classes increased 37.5 percent, and in the fourth-year classes 43.4. No data are available showing the number of postgraduate students in 1930. In 1932, 36,541 such students were reported and in 1934, 59,321, which represent an increase of 38.4 percent within the 2-year period. The great increase in the number of postgraduate students was due chiefly to the fact that thousands of high-school graduates who could not find employment, or who had no means of going to college, returned to high school for additional courses. The increase in high-school enrollment was due partly to the fact that other thousands of boys and girls, who having arrived at the work-permit age and who would have left school if they could have found work were compelled to remain in school, and others who were at work reenrolled when they were out of employment.

*IMPORTANT CHANGES IN FINANCING THE PUBLIC SCHOOLS*¹

Since the retrenchments noted in the foregoing pages were caused by insufficient funds, the chief problem to be solved was that of providing a more scientific basis for school support than had previously existed.

The need for thoroughgoing revision or improvement of plans for financing education was felt in many if not all States long before the industrial depression. After that situation developed, many school systems in common with numerous other organizations, both governmental and nongovernmental, found it difficult and frequently impossible to meet their financial obligations. This was true with respect to school districts not only in those States where localities carried the major part of the burden of school costs but in practically all States. Obviously, the school system obliged to depend chiefly upon local ad valorem taxes for its source of revenue, as is the case where local support predominates, is more likely to face a shortage of

¹ Prepared by Timon Covert, Specialist in School Finance.

funds in times of financial difficulty than is the system supported by various types of taxes which the State may feasibly administer.

After resorting to various local expedients, such as short-term borrowing, deferring payments, and curtailing and reducing expenditures, in their attempts to administer the fiscal affairs of the schools on reduced revenues, school district officials naturally turned to the State for assistance. This was the logical procedure since school districts exist to serve a function of State government. When localities reached the limit of their taxing ability and financial difficulties became too great for local solution, as they had been doing gradually before 1930 and rapidly since, remedial legislation was imperative. Accordingly, we find a number of revisions in State plans for public-school finance made as a direct result of, or hastened by, the industrial depression. The following are probably the most significant results of these revisions: Provisions in a number of States for a relatively larger amount of funds for the public schools from State-wide sources, changes in methods of apportioning State school funds, and closer oversight and control of local school finance by the State.

1. *State funds for a larger share of school costs.*—Among the most significant changes since 1930 in plans for financing the school are those that in effect transferred to the State a part of the costs previously carried by local school districts or counties, or both. School costs have increased greatly with expanding and better school facilities during the last 30 years. This fact is well known. In some States, as school costs increased, provision was made from time to time for increasing the amount of State-school support. In general, however, the increase in amount of funds provided by the State did not keep pace with the increase in school costs. As a result in a majority of cases local school revenue units were obliged to raise more and more funds with the only feasible means for doing so at their command, namely, general property taxation. Overburdened as local taxpayers were with high tax levies on their general property for numerous functions of local government, including the constantly increasing rates necessary for schools in so many instances where the State had been indifferent to rising costs, when the crisis came they were in no position to pay a higher rate or even to continue paying as much as previously. Unpaid taxes, excessive indebtedness, and legal restrictions all contributed to the general collapse of school district ability to meet obligations. Little wonder that State legislatures hastened effective revisions.

The percentage of public-school revenue derived from State sources for the country as a whole was 20.3 in 1900. From that percentage it had declined to 16 percent by 1925, which appears to be about the lowest point. Since the latter date the percentage for all States combined has increased during each 2-year period especially since 1930. For the year 1934 nearly 25 percent of such revenue was derived from

State-wide sources. Examining the sources of school funds for individual States, we find that in 1930 only 7 States provided as much as 30 percent of the revenue used by their schools, while in 1934, 18 States provided that much or more. Although later data from all States are not available, the comparatively large number of States which provided for larger State school funds in 1935 undoubtedly places several additional States on the list which now provide 30 percent or more of the funds necessary for their public schools.

Of the States which have recently provided more funds for the public schools from the State as a unit, North Carolina has gone farther than any other. After considerable effort to equalize school costs throughout the State, legislation was enacted in North Carolina in 1931 providing State funds for the support of 6 months of school in all districts. Two years later, the plan was again revised and the State has since paid all current costs, as fixed by law, of 8 months of school, excepting those for maintenance of buildings and fixed charges. Costs legally incurred in excess of those guaranteed by the State and school building costs are paid by the respective county and independent school districts.

Other States which since 1930 have provided for State payment of considerably larger percentages of the costs of their school programs than they had been paying previously include West Virginia, Ohio, Oklahoma, Indiana, Oregon, Alabama, California, Florida, Michigan, Utah, North Dakota, Tennessee, and Louisiana. Some of these States had been providing comparatively high percentages of the funds used by their schools while others had not previously done so. The percentages of such funds supplied by the State, by the county, and by the local school district, and also by the Federal Government and by educational foundations are shown for the United States and by States in table 25 for the 2 years 1929-30 and 1933-34.

TABLE 25.—PERCENTAGE ANALYSIS OF PUBLIC-SCHOOL REVENUE RECEIPTS, BY SOURCES, 1929-30 AND 1933-34

State and year	Percentage from—				
	State	County	Local district (includes towns and townships)	Federal (Govern- ment)	Subsidies and educa- tional founda- tions
1	2	3	4	5	6
Continental United States:					
1929-30.....	17.2	10.8	71.6	0.4	0.0004
1933-34.....	23.4	9.3	66.1	1.2	.0002
Alabama:					
1929-30.....	39.7	33.4	25.8	.7	.4
1933-34.....	34.0	30.3	23.0	12.6	.2
Arizona:					
1929-30.....	19.2	37.1	43.3	.4
1933-34.....	29.5	35.0	33.6	1.9
Arkansas:					
1929-30.....	32.3	4.8	61.5	.9	.5
1933-34.....	20.0	5.6	65.8	7.3	.3

TABLE 25.—PERCENTAGE ANALYSIS OF PUBLIC-SCHOOL REVENUE RECEIPTS, BY SOURCES, 1929-30 AND 1933-34—Continued

State and year	Percentage from—				
	State	County	Local district (includes towns and townships)	Federal Govern- ment	Subsidies and educa- tional founda- tions
1	2	3	4	5	6
California:					
1929-30	25.5	36.6	37.7	.2	.05
1933-34	48.7	4.3	46.8	.2	
Colorado:					
1929-30	3.1	22.9	73.8	.2	
1933-34	3.3	24.5	71.5	.7	
Connecticut:					
1929-30	7.9		91.9	.2	
1933-34	9.2		90.5	.3	
Delaware:					
1929-30	87.3		12.1	.6	
1933-34	92.5		6.9	.6	
Florida:					
1929-30	21.8	28.4	48.7	.8	.3
1933-34	29.1	48.5	18.1	4.2	.1
Georgia:					
1929-30	34.5	28.4	36.0	.9	.2
1933-34	29.4	26.7	33.6	10.2	.1
Idaho:					
1929-30	7.5	23.9	68.4	.2	
1933-34	8.6	29.2	61.6	.6	
Illinois:					
1929-30	4.4		94.7	.9	
1933-34	6.8	.1	92.6	.5	
Indiana:					
1929-30	5.2	.2	94.3	.3	
1933-34	27.0		72.6	.4	
Iowa:					
1929-30	3.9		95.8	.3	
1933-34	1.9	2.5	95.3	.3	
Kansas:					
1929-30	1.4		98.4	.2	
1933-34	2.0	11.8	85.7	.5	
Kentucky:					
1929-30	25.2	28.5	45.4	.7	.2
1933-34	24.2	29.7	43.1	3.0	
Louisiana:					
1929-30	26.2	53.2	20.0	.4	.2
1933-34	33.7	44.1	16.9	5.2	.1
Maine:					
1929-30	28.1		71.4	.5	
1933-34	32.6		66.8	.6	
Maryland:					
1929-30	17.3	34.3	48.0	.4	.04
1933-34	24.3	28.2	47.1	.4	
Massachusetts:					
1929-30	9.2		90.5	.3	
1933-34	11.8		88.0	.2	
Michigan:					
1929-30	18.1		81.8	.1	
1933-34	23.5		76.0	.5	
Minnesota:					
1929-30	20.3	5.3	74.1	.3	
1933-34	26.4	5.3	67.8	.5	
Mississippi:					
1929-30	32.3	22.5	44.0	.7	.5
1933-34	37.9	25.1	23.1	13.6	.3
Missouri:					
1929-30	10.1	4.9	84.4	.5	.02
1933-34	7.9	2.1	88.7	1.3	
Montana:					
1929-30	13.7	37.3	48.6	.4	
1933-34	9.5	47.9	41.3	1.3	
Nebraska:					
1929-30	4.7	.3	94.3	.7	
1933-34	5.5	.5	93.0	1.0	
Nevada:					
1929-30	18.0	52.2	28.8	1.0	
1933-34	15.3	56.6	26.6	1.5	
New Hampshire:					
1929-30	8.7		91.0	.3	
1933-34	9.1		90.6	.3	

¹ For the city of Baltimore.

TABLE 25.—PERCENTAGE ANALYSIS OF PUBLIC-SCHOOL REVENUE RECEIPTS, BY SOURCES, 1929-30 AND 1933-34—Continued

State and year	Percentage from—				
	State	County	Local district (includes towns and townships)	Federal Govern- ment	Subsidies and educa- tional foun- dations
1	2	3	4	5	6
New Jersey:					
1929-30.....	21.1	.8	77.9	.2	
1933-34.....	2.6	19.0	78.2	.2	
New Mexico:					
1929-30.....	21.2	60.1	18.1	.6	
1933-34.....	16.9	59.3	18.7	5.0	.1
New York:					
1929-30.....	27.4		72.4	.2	
1933-34.....	28.3		71.5	.2	
North Carolina:					
1929-30.....	19.5	43.9	35.8	.5	.3
1933-34.....	61.5	22.6	13.1	2.7	.1
North Dakota:					
1929-30.....	10.9	7.2	81.7	.2	
1933-34.....	10.5	15.9	69.3	4.3	
Ohio:					
1929-30.....	3.7	31.3	64.6	.4	
1933-34.....	15.3	20.9	63.4	.4	
Oklahoma:					
1929-30.....	10.1	8.0	81.4	.3	.2
1933-34.....	29.4	2.5	63.5	4.6	.03
Oregon:					
1929-30.....	2.1	14.5	83.2	.2	
1933-34.....	1.8	23.1	74.1	1.0	
Pennsylvania:					
1929-30.....	13.5		86.1	.4	
1933-34.....	20.3		79.4	.3	
Rhode Island:					
1929-30.....	8.4		91.4	.2	
1933-34.....	6.0		93.7	.3	
South Carolina:					
1929-30.....	24.1	24.2	50.3	.6	.8
1933-34.....	27.7	5.5	62.5	3.9	.4
South Dakota:					
1929-30.....	9.9		89.9	.2	
1933-34.....	9.1		88.7	2.2	
Tennessee:					
1929-30.....	23.7	35.2	40.1	.8	.2
1933-34.....	42.5	39.8	13.5	4.2	
Texas:					
1929-30.....	38.9	12.7	47.9	.4	.1
1933-34.....	61.5	9.5	37.0	1.9	.1
Utah:					
1929-30.....	33.3		66.4	.3	
1933-34.....	39.2	34.4	24.9	1.5	
Vermont:					
1929-30.....	12.0		87.8	.2	
1933-34.....	15.7		84.0	.3	
Virginia:					
1929-30.....	26.9	33.6	38.4	.8	.3
1933-34.....	26.7	34.4	34.2	4.3	.4
Washington:					
1929-30.....	28.6	14.6	56.5	.3	
1933-34.....	37.0	12.3	50.3	.4	
West Virginia:					
1929-30.....	7.9		91.7	.4	.00+
1933-34.....	49.1	47.9		3.0	
Wisconsin:					
1929-30.....	16.7	8.6	74.3	.4	
1933-34.....	19.8	10.7	69.1	.4	
Wyoming:					
1929-30.....	26.8	19.2	53.7	.3	
1933-34.....	24.5	21.6	52.1	1.8	

¹ Includes a considerable amount of money allocated back to the counties on exactly the same basis it was received.

² Estimated on data contained in North Carolina State Department of Education, biennial report of education for 1928-30.

³ Data provided in letter from State Department of Education, Jan. 28, 1936.

⁴ Approximately $\frac{1}{4}$ of the funds indicated in column 4 as coming from the State's permanent school fund actually comes from the Federal Government as royalty on the production of oil within the State on land belonging to the U. S. Government. A number of other States also receive such funds, but in comparatively smaller amounts.

2. *Changes in methods of apportioning State school funds.*—While the primary purpose of recent revisions in school finance which provide for larger State school funds probably has been to transfer a part of the tax burden from general property to other types of wealth, there has frequently been a second important purpose. It is that of equalizing school costs among the various school-revenue units of the State. It is well known that the revenue-producing ability of localities within any given State varies greatly in relation to their public-service needs. If localities were alike in this respect, taxation would be a simple matter and a State's educational program could be financed locally with a uniform burden for all.

Previous to about 1920, little recognition had been given to this problem in the distribution of State school funds insofar as any attempt at its complete solution was concerned. Since then many States have attempted to do so. There are two general plans which may be used by the States for equalizing school costs: First, if the State pays the entire cost, equalization, of course, will result; second, if the State pays that part of the cost which any and all districts cannot pay with the proceeds of a uniform tax rate, equalization of costs will result.

The early plans providing for the apportionment of State school funds used such bases as the school census and attendance. These, however, are measures of educational need rather than of financial ability to pay. Funds from State-wide sources distributed to local school districts give relief, or should give relief, to such districts from local taxation equal to amounts received from the State. If the distribution is on a uniform and sound basis of school needs, school costs are equalized throughout the State to the extent of the relief. In other words, if the State provides a fourth of the necessary school revenue, local school taxes may be lower and at least 25 percent of the education cost has been equalized throughout the State. The degree of equalization brought about mounts as the proportion of the total public-school revenue from the State increases; and, without considering the variation in ability of local districts to pay when distributing the State revenue, complete equalization of the cost of public education would result only with complete State support. On the other hand, the apportionment of State funds may be made in such a manner as to supplement local funds raised by a uniform rate and equalization of cost effected with a smaller amount of State funds.

It appears that during the period of the depression when providing for additional State funds for the schools, most State legislatures have had both objectives (local tax relief and equalization of school costs) in mind, for the regulations for apportioning the newly provided funds in a number of cases use a combination of the two plans

mentioned above. In other words, provision has been made for distributing a definite part of the additional State funds to school districts on such bases as school census or number of teacher units, and the remainder or another definite part to equalize school costs. On the other hand, however, provisions for apportioning the additional State aid disregard entirely the variations in ability of local districts to support schools.

Some States, as California and Washington, which have recently provided for paying a larger share of their public-school costs than previously, had not been, nor now are, distributing State school funds so as to equalize the cost of a foundation program among their local districts; others, as Arkansas and Indiana, had been distributing funds on this basis to some extent and continue to do so, but use other bases in apportioning the new funds; while some, as Florida and Virginia, which had used this basis, no longer do so.

While recently provided plans for distributing State school funds are not always different from some which were in operation before the period of the emergency, it is significant to note some of their principal features; in them we find evidences of closer State interest and oversight in the financial welfare of education. For example, the new Ohio plan for financing her public schools combines the two bases (flat grants to each district and ability to pay) in the new provisions for distributing State school funds, and directs county boards of education to make a yearly survey of the school situation with respect to feasible redistricting, revision in pupil transportation facilities, and other improvements. The essentials of the Ohio plan follow:

Until recently the Ohio plan for State school support provided three school-revenue units: The State, the county, and the local school district. Under the present (1935) law the county does not constitute such a unit. As in most States west of the Allegheny Mountains, the local school district prevails in Ohio and, in spite of the fact that the State and county both contributed to the support of schools, it has been obliged to carry the greater part of the burden; in 1933-34 the State paid 15.7 percent, the county 20.9 percent, and local districts 63.4 percent.

The administrative organization is the county-district type with the greater amount of authority concerning school control centered in the local district. Previous to January 1935 each county was required to levy a tax of 2.65 mills on the dollar of assessed valuation of its general property. Proceeds of this county school tax in city and independent village districts were retained in the respective districts, but the proceeds of the tax in the territory of each county outside of the independent districts constituted a county fund for equalizing school costs among the small or dependent village and

rural school districts which met prescribed standards. The State also provided an equalization fund for those districts which could not maintain specified school standards with all other available revenue including their local revenue from a uniform local tax levy. However, State funds, as indicated, were distributed chiefly on the school census basis.

In common with many other States, Ohio has experienced much difficulty during recent years with school financial problems. In the midst of her difficulties a constitutional amendment was voted lowering the maximum tax rate on general property which governmental units might levy. As a result of the financial difficulties and the inability of many school districts to raise sufficient revenue to maintain schools, the State's plan for school support has undergone almost complete revision since 1931.

The school funds which are provided at present by the State of Ohio for the public schools are derived from a number of sources: (1) The State pays interest (appropriations from the general fund) on a part of an irreducible debt it owes to its school land fund. The debt of approximately four million dollars yields 6 percent interest for the support of schools in districts in which school land had been sold previous to 1917; (2) the State maintains a small trust fund derived from school land sales since 1917 and income from unsold school lands which yields annual revenue for school districts in which such lands were, or are, located; (3) the legislature provided for a cigarette tax in 1931, a liquid fuel tax (to be levied for a specified period of time) and a tax on classified intangibles in 1933, and a general sales tax in 1934 (to be levied for a specified period of time) the proceeds of which are partially or wholly for the State public-school fund; and (4) the legislature appropriates from the general fund for vocational education and from this or other sources for the education of handicapped children and frequently appropriates from the general fund for the State public-school fund.

Legislation enacted in 1935⁴ for financing the public schools provides for the apportionment of the State's public-school fund (revenue derived from sources indicated in (3) of the preceding paragraph) on two bases. These are average daily attendance and equalization of school costs.

3. Closer State oversight and control of financing education.— Even though local communities in the various States enjoy a considerable degree of freedom in the establishment, administration, and control of the schools, it is well understood that education is a function of the State government. Consequently, each State sets up certain minimum standards and certain regulations for the guidance and control of local districts with respect to education and its support.

⁴ A plan effective during the school year 1934-35 was quite similar to the one adopted in 1935.

That State legislatures have within recent years moved in the direction of more State control and oversight there can be little doubt.

There are a number of reasons why it seemed necessary for the State to assume more actual control over the general affairs of education and of school finance in particular. In the first place, with the concentration of productive wealth in certain areas, early provisions for raising school revenues have become unsatisfactory. Some wealthy communities continue even at present amply able to support schools locally while others with little taxable property have found it increasingly difficult to do so. Further complicating the situation, during the years of the depression many poor school districts increased their tax levies and incurred indebtedness beyond reasonable limits in their attempts to meet their obligations. The result was a widespread condition of confiscatory local tax problems as well as a general situation of tax delinquency.

In the face of the problem of confiscatory local taxation, legislation limiting local taxing privileges was enacted in a number of States. Among the States in which such privileges were limited by constitutional or statutory law probably as a result of conditions created by the industrial depression, are Michigan, West Virginia, Ohio, California, Colorado, Louisiana, North Carolina, Kansas, Maryland, New Jersey, and New Mexico. These limitations were followed by legislative provisions in a number of States for larger amounts of State funds, as discussed in a preceding section, for the schools. The action of the Legislature of West Virginia, following a constitutional amendment lowering maximum local tax limits, affords a good example.

The local tax situation became so acute in West Virginia that relief was sought at the November 1932 election in the form of a constitutional amendment which classified property for taxation and fixed maximum property-tax rates. After the amendment became effective, the amount of revenue it was possible to raise locally for education was so reduced that the legislature in 1933 provided for the allotment of \$5,500,000 from a State-wide general sales tax in lieu of the local restrictions. It should be noted too in this connection that the legislature took steps at this time to establish more efficient and economical school administrative units as a part of the State's remedial program. Under the revised law of 1933, all existing magisterial and city school districts were abolished and in their place 55 county school districts were established. Of this revision a State school official wrote:⁵ "To have continued the district form of organization and the same salary schedules would have meant a decided curtailment of the length of school term. * * *"

⁵ Cavins, L. V. West Virginia's county unit system. State department of education, Charleston (1933), 8 p., mimeographed.

Other recent controls on school finance include closer State supervision of budgets and expenditures. In many States as a result of recent legislation local school district budgets must conform to instructions in the law itself or to regulations formulated by State school officials. Considerably more attention must be given now than previously in a number of States to the matter of effecting the consolidation of school attendance and administrative units by county and local school officials before such officials submit their annual reports to the State. State school funds in Ohio and Oklahoma, for example, under their revised State school support plans are not authorized for use in small schools which can feasibly be united with others. Salaries of school employees, pupil transportation costs, and fees for tuition are other items of school expense which in a number of instances have recently been brought under closer State oversight.

Other significant effects of the recent industrial depression on public-school finance.—There are numerous other ways in addition to those discussed on the preceding pages in which public-school finance has been affected by the industrial depression. Some are of considerable significance and merit treatment in a review of this kind. Among the most important of these are the provisions for new State taxes in a number of States. As pointed out above, new State taxes were provided in order to relieve local school districts of a part of their general property tax burden. In some instances the new tax is levied and a part or all of the proceeds allocated to the public schools; in other States the levy is made and the proceeds allocated to the States' general fund from which appropriations are made for education. Some of the most important as well as most frequently used of these new State sources of revenue are the income, the liquor, the sales, and the corporation taxes. In a number of States where taxes of certain types had been levied on a State-wide basis for the benefit of schools, rates were increased during the financial difficulties to secure additional State funds.

The difficulty of securing sufficient revenue for public service needs, experienced by practically all fiscal officers during the depression has clearly demonstrated, if any demonstration was necessary, that a stable supply of revenue is more likely to result year after year when, instead of a single tax, several types of taxes are depended upon. This fact, of course, explains why it was that local school districts were unable to raise additional funds during the last few years when general property taxes became inadequate, since other important types of taxes are not considered feasible for local administration.

State authorities in a number of instances have found, too, during the recent difficulties, that provisions for regular general fund appropriations for education or any other function of government, even when the basis for determining the amount of the appropriation is

reliable, may not always prove satisfactory. When the budgetary needs of all functions of government have been treated fairly, such appropriations have proved satisfactory. It is gratifying to note that steps have been taken in some States within the last few years to correct defects of this nature.

In conclusion, it seems apparent now that, although many schools were temporarily harmed and numerous children were deprived of normal school facilities for a time, the recent financial difficulties have served to call general attention to weaknesses in State plans for school support. There can be little doubt that long-delayed fundamental improvements in such plans have been or will be made throughout the country as a direct or indirect result of the recent financial difficulties. A review of recent events in school finance is convincing in this respect.

II. COLLEGES AND UNIVERSITIES ⁶

Probably 1933-34 was the depression low as experienced by colleges and universities. The comparison between that year and some predepression year, or even with 1931-32, will give the best measure of the effect of the depression.

FINANCIAL SUPPORT

The total receipts from public sources, from endowment income, from student fees, and from gifts for higher education institutions of all types were as follows:

Year	Number of institutions	Public sources	Endowment	Student fees	Gifts
1	2	3	4	5	6
1929-30	1,209	\$205,653,051	\$68,604,947	\$144,125,879	\$140,093,284
1931-32	1,380	199,641,930	60,902,567	150,649,047	108,902,478
1933-34	1,357	142,861,675	55,533,447	138,257,350	58,617,709

Over the 4-year period this indicates a reduction in income of nearly \$63,000,000, or 31 percent, from public sources; more than \$13,000,000, or 19 percent, from endowment; nearly \$6,000,000, or 4 percent, from student fees; and more than \$81,000,000, or 57 percent, from gifts.

Expenditures are commonly divided among several categories, the principal two of which are (1) "educational and general" and (2) "plant funds." The first of these covers all the usual costs of maintaining the educational activities, while the second covers all buildings and permanent equipment. It was in the latter category that the

⁶ Prepared by F. J. Kelly, Chief, Division of Higher Education, and John H. McNeely, Specialist in Higher Education.

expenditures were cut most severely. The decade 1931-32 to 1933-34 witnessed a decrease of almost \$51,000,000, or 12 percent, in "educational and general" and a decrease of nearly \$73,000,000, or 74 percent in "plant funds."

While the above figures represent the effect on income and expenditures for the country as a whole, the effects suffered by individual colleges differed very widely from these figures. While most colleges suffered severely, probably the load fell heaviest upon the small colleges which depend most largely upon student fees. These colleges have but little reserve with which to meet emergencies; therefore, they are dependent from year to year upon the income from student fees and from relatively small endowments. In some cases these endowments produced little or no income during the depression.

In order to indicate the seriousness of the situation faced by these colleges, quotations are here made from a report prepared in February 1934, from questionnaires sent by the Office of Education to a fairly wide sampling of the colleges and universities throughout the country. The nature of the questions asked is revealed in the tables compiled from them.

Reports were received from 279 institutions under either private or church control. From these reports, it was clear that colleges affiliated with churches were in more serious financial straits than were other privately controlled institutions; therefore, the reports divide the colleges into two groups—church-controlled colleges and privately controlled colleges. The following quotations are taken from the report:

Almost half the church colleges were in arrears in payments due their faculties in February 1934. Seven private colleges were also unable to complete salary payment due members of their faculties. Thirty-two institutions (30 church, 2 private) each owed faculty members more than \$20,000. Nine church colleges and one private college were each in arrears on salaries more than \$40,000 in February.

Reasons for the financial difficulties are that church and private colleges are carrying a large number of needy students, accepting notes for tuition; that some have accumulated obligations for salaries and other operating costs; that many have obligations for buildings and repairs which require refinancing; and that many have mortgages, bonds and other miscellaneous debts which are difficult to meet in these times.

Only 20 out of 210 church colleges, and only 7 out of 69 private colleges have no students who have not had to give notes for their tuition. In each of 28 church institutions and 15 private institutions, more than 300 students have given notes for all or part of their tuition.

Five church colleges and six private colleges each have more than \$80,000 in tuition due them from students they are carrying through the hardships of the economic situation. Tuition notes to the amount of \$10,000 and up are in the hands of treasurers of each of 96 church colleges and 43 private colleges reporting.

Although 85 church colleges and 52 private colleges report that they have been able to pay current operating costs, including salaries, many are not so fortunate. Seven institutions are "in the red" on current maintenance obligations to the extent of \$125,000 or more; 29 have \$50,000 or more outstanding.

Bonds requiring interest payment, mortgages, and other debts comprise another source of financial difficulty. Sixty-three church colleges report a total of \$10,399,713 in such debts; private colleges, \$6,950,000; a total of \$16,404,713 for 80 colleges.

The same reports which disclose the serious financial straits of private and denominational institutions tell what the faculties have done to help meet the situation. In 18 church institutions and 3 private colleges, salaries, which were never large, have been cut 50 percent or more. Twenty-one of 69 private institutions, and 174 out of 210 church colleges reporting have reduced salaries 20 percent or more.

Only 23 church colleges and 21 private colleges have not reduced the faculty salary scale.

The principal data are assembled in table 26.

TABLE 26.—DISTRIBUTION OF COLLEGES ACCORDING TO 5 ECONOMIC FACTORS, 1933-34

I: NUMBER OF STUDENTS WITH NOTES FOR TUITION OUTSTANDING

	Church colleges	Private colleges	Total
1	2	3	4
<i>Students giving notes</i>			
None.....	20	7	27
1-49.....	53	11	64
50-99.....	37	13	50
100-149.....	31	10	41
150-199.....	20	5	25
200-249.....	10	5	15
250-299.....	11	3	14
300-349.....	7	2	9
350 or above.....	21	13	34
Total.....	210	69	279

II: AMOUNTS OF STUDENT TUITION NOTES OUTSTANDING

	Church colleges	Private colleges	Total
<i>Amounts</i>			
None.....	19	7	26
\$1-\$9,999.....	95	19	114
\$10,000-\$19,999.....	34	14	48
\$20,000-\$29,999.....	23	10	33
\$30,000-\$39,999.....	16	3	19
\$40,000-\$49,999.....	6	4	10
\$50,000-\$59,999.....	6	2	8
\$60,000-\$69,999.....	4	4	8
\$70,000-\$79,999.....	2	0	2
\$80,000 or above.....	5	6	11
Total.....	210	69	279

TABLE 26.—DISTRIBUTION OF COLLEGES ACCORDING TO 5 ECONOMIC FACTORS, 1933-34—Continued

III: PERCENTAGE REDUCTION IN SCALE OF FACULTY SALARIES, 1929-30 TO 1933-34

	Church colleges	Private colleges	Total
1	2	3	4
<i>Percentage reduction</i>			
None.....	23	21	44
1-9.....	4	2	6
10-19.....	48	25	73
20-29.....	58	10	68
30-39.....	38	5	43
40-49.....	20	3	23
50-59.....	10	3	13
60 or above.....	8	0	8
Total.....	209	69	278

IV: ARREARS IN PAYMENTS DUE ON FACULTY SALARIES

	Church colleges	Private colleges	Total
<i>Amounts in arrears</i>			
None.....	105	62	167
\$1-\$4,999.....	19	1	20
\$5,000-\$9,999.....	19	2	21
\$10,000-\$14,999.....	18	0	18
\$15,000-\$19,999.....	16	2	18
\$20,000-\$24,999.....	5	0	5
\$25,000-\$29,999.....	6	1	7
\$30,000-\$34,999.....	7	0	7
\$35,000-\$39,999.....	3	0	3
\$40,000 or above.....	9	1	10
Total.....	207	69	276

V: OUTSTANDING CURRENT MAINTENANCE OBLIGATIONS TO BE REFINANCED

	Church colleges	Private colleges	Total
<i>Amounts</i>			
None.....	85	52	137
\$1-\$24,999.....	32	8	40
\$25,000-\$49,999.....	20	2	22
\$50,000-\$74,999.....	12	1	13
\$75,000-\$99,999.....	5	1	6
\$100,000-\$124,999.....	3	0	3
\$125,000 or above.....	2	5	7
Total.....	159	69	228

The same questionnaire, as reported in the above tables for church-controlled and privately controlled colleges was also sent to a representative number of publicly controlled institutions, both universities and teachers' colleges. In a considerable fraction of these institutions there is no regular authorization to accept student notes for tuition or to allow faculty salaries to become in arrears. In spite of this fact more than half of the publicly controlled institutions had accepted notes for student fees. In some institutions more than 1,000 students had given notes instead of cash for tuition. In one institution the amount of student notes held exceeded \$200,000.

There was nothing, however, to prevent the reduction in faculty salaries in publicly controlled institutions and this device was resorted to in practically all of them. While the percentages varied widely, about half of the institutions had reduced their salaries by 20 percent or more by February 1934. Some of them had reduced salaries by as much as from 30 to 35 percent.

FACULTY SALARIES

Amplifying the general statement concerning reductions in salaries cited above two special studies were made by the Office of Education of the effects of the depression upon salary scales. One of these was a study of salaries in the land-grant colleges reported in Circular No. 157, 1936; the other was reported in *School Life* for March 1936. The important findings concerning salaries in the land-grant colleges are reproduced in the following table:

TABLE 27.—SALARIES OF FULL-TIME MEMBERS OF FACULTIES EMPLOYED ON A 9-MONTHS' BASIS IN 51 LAND-GRANT INSTITUTIONS ATTENDED BY WHITE STUDENTS

A. PROFESSORS

	1928-29	1929-30	1930-31	1934-35
First quartile.....	\$3,765	\$3,817	\$3,871	\$3,174
Median.....	4,278	4,457	4,513	3,775
Third quartile.....	5,074	5,216	5,215	4,400

B. ASSOCIATE PROFESSORS

First quartile.....	\$3,034	\$3,022	\$3,041	\$2,531
Median.....	3,342	3,340	3,362	2,903
Third quartile.....	3,682	3,716	3,743	3,294

C. ASSISTANT PROFESSORS

First quartile.....	\$2,491	\$2,553	\$2,527	\$2,115
Median.....	2,738	2,818	2,837	2,449
Third quartile.....	3,148	3,187	3,202	2,786

D. INSTRUCTORS

First quartile.....	\$1,823	\$1,832	\$1,829	\$1,542
Median.....	2,005	2,060	2,066	1,769
Third quartile.....	2,236	2,253	2,374	2,010

In the *School Life* study, colleges under private or church control are classified according to the number of students enrolled and also according to whether they are colleges for men, for women, or for both. In this table maximum and minimum salaries rather than first quartile and third quartile salaries are used.

TABLE 28.—SALARIES, PRIVATELY CONTROLLED COLLEGES OF 200 TO 499 STUDENTS, 1929-30 AND 1934-35

Item	Professors		Associate professors		Assistant professors		Instructors	
	1929-30	1934-35	1929-30	1934-35	1929-30	1934-35	1929-30	1934-35
1	2	3	4	5	6	7	8	9
All colleges reporting:								
Number reporting.....	63	63	27	27	36	86	42	42
Maximum salary.....	\$5,500	\$5,500	\$5,000	\$4,095	\$3,800	\$3,680	\$2,700	\$2,500
Median salary.....	\$3,030	\$2,336	\$2,646	\$2,156	\$2,235	\$1,864	\$1,775	\$1,539
Minimum salary.....	\$1,500	\$980	\$1,600	\$600	\$1,350	\$530	\$900	\$300
By number of students enrolled:								
200 to 299 students:								
Colleges reporting.....	24	24	5	5	12	12	13	13
Maximum salary.....	\$3,600	\$3,900	\$2,650	\$2,400	\$2,500	\$2,600	\$2,100	\$2,000
Median salary.....	\$2,625	\$2,143	\$2,250	\$1,916	\$2,167	\$1,667	\$1,652	\$1,542
Minimum salary.....	\$1,500	\$1,200	\$1,600	\$1,745	\$1,650	\$1,000	\$1,200	\$950
300 to 399 students:								
Colleges reporting.....	23	23	12	12	12	12	14	14
Maximum salary.....	\$5,500	\$4,895	\$5,000	\$4,095	\$3,800	\$3,680	\$2,700	\$2,000
Median salary.....	\$3,083	\$2,375	\$2,700	\$2,125	\$2,300	\$1,857	\$2,000	\$1,333
Minimum salary.....	\$1,728	\$1,300	\$1,800	\$1,500	\$1,350	\$900	\$900	\$300
400 to 499 students:								
Colleges reporting.....	16	16	10	10	12	12	15	15
Maximum salary.....	\$5,250	\$5,500	\$3,550	\$3,700	\$3,500	\$2,800	\$2,500	\$2,500
Median salary.....	\$3,188	\$3,000	\$2,700	\$2,500	\$2,250	\$2,167	\$1,806	\$1,708
Minimum salary.....	\$2,000	\$980	\$2,100	\$600	\$1,800	\$530	\$1,200	\$420
By sex of students admitted:								
Men's colleges:								
Number reporting.....	7	7	3	3	4	4	4	4
Maximum salary.....	\$5,500	\$5,500	\$5,000	\$4,095	\$3,800	\$3,680	\$2,500	\$2,300
Median salary.....	\$4,250	\$3,250	\$3,750	\$3,750	\$3,500	\$2,750	\$2,500	\$1,833
Minimum salary.....	\$2,000	\$1,800	\$3,500	\$2,500	\$2,850	\$2,000	\$2,000	\$1,680
Women's colleges:								
Number reporting.....	12	12	8	8	10	10	11	11
Maximum salary.....	\$3,600	\$3,500	\$3,100	\$3,000	\$2,680	\$2,600	\$2,700	\$2,000
Median salary.....	\$3,188	\$3,083	\$2,333	\$2,250	\$2,000	\$2,000	\$1,650	\$1,583
Minimum salary.....	\$2,364	\$980	\$1,800	\$600	\$1,600	\$530	\$1,200	\$420
Coeducational colleges:								
Number reporting.....	44	44	16	16	22	22	27	27
Maximum salary.....	\$3,800	\$3,600	\$3,200	\$2,675	\$3,000	\$2,250	\$2,400	\$2,500
Median salary.....	\$2,813	\$2,194	\$2,650	\$2,000	\$2,200	\$1,583	\$1,750	\$1,450
Minimum salary.....	\$1,500	\$1,200	\$1,600	\$1,500	\$1,350	\$900	\$900	\$300

ENROLLMENTS

In the statistical section of the Biennial Survey of the Office of Education some analysis is made of the effects of the depression upon student enrollments. Between the year 1931-32 and the year 1933-34 the total enrollments of regular collegiate grade students in all institutions dropped 8.56 percent. Analyzing this figure some significant differences are revealed among various types of institutions. For example, undergraduates in arts and sciences in publicly controlled institutions actually increased 1 percent during that biennium, whereas undergraduates in arts and sciences in privately controlled institutions decreased 5 percent. On the other hand, graduate students in arts and sciences in publicly controlled institutions decreased 11 percent while graduate students in arts and sciences in privately controlled institutions decreased only 8 percent.

Another striking difference is in the professional schools. Undergraduates in professional schools in publicly controlled institutions

decreased 3 percent, while undergraduates in professional schools in privately controlled institutions decreased 8 percent. In contrast with this, graduate students in professional schools in publicly controlled institutions decreased 20 percent, while graduate students in professional schools in privately controlled institutions decreased only 2 percent.

The effects upon the enrollments of men and of women appeared not to be strikingly different in degree-granting universities and colleges, but were far more severe upon men than upon women in professional schools, both undergraduate and graduate. They were also far more severe upon men than upon women in the non-degree-granting institutions, excluding teachers colleges and normal schools. For example, the decrease of men students in these non-degree-granting institutions was 12 percent, while the decrease of women students was 3 percent. On the other hand, in degree-granting teachers colleges the decrease in men students was 10 percent, while the decrease of women students was 17 percent. In non-degree-granting teachers colleges and normal schools the men students decreased 15 percent and the women 33 percent.

The severest drop in enrollments occurred in summer sessions. In degree-granting colleges and universities men students in summer sessions dropped 17 percent and women students 26 percent, while in degree-granting teachers colleges men students dropped 23 percent and women students 39 percent during the summer sessions.

The above analysis reveals two different influences affecting student enrollments: (1) High tuition schools suffered most; and (2) the overcrowded teaching profession discouraged further preparation in that line.

Some striking differences in the effects upon enrollments are revealed also when analysis is made by States. Taking all types of institutions combined, the enrollment from 1931-32 to 1933-34 actually increased in institutions in nine States and decreased in the rest. The decrease in Michigan and South Dakota was 21 percent; in West Virginia, 20 percent; and in Missouri, 19 percent. From these high percentages of decrease States ranged through zero to actual increases of 4 percent in New Jersey and Idaho and 5 percent in North Dakota.

LEGISLATION AFFECTING STATE COLLEGES AND UNIVERSITIES

One of the outstanding aspects of the depression was the widespread enactment of new laws by State legislatures affecting directly or indirectly State colleges and universities. Statutes were enacted in many States reorganizing their governments and altering their administrative machinery. State universities and colleges commonly came under the purview of such statutes along with the other units of

the State government. The purpose of these measures was to centralize authority over the various functions of the State including State higher education.

For more than a decade, a strong trend has existed among the States toward unified governing boards of State universities and colleges. During the period of the depression this trend gained further impetus. In 1931, the Legislature of Georgia enacted a law abolishing the separate boards governing its 25 institutions of various types and established a "University system of Georgia" under the control of a unified board. This board subsequently through consolidations and other measures reduced the number of institutions included in the system to 18.

The Legislature of Mississippi in 1932 placed its six institutions under a single board. In 1935, the Legislature of Rhode Island unified the control of its two State institutions by creating a single board to exercise governing authority over them. Both of these institutions were formerly governed by separate boards.

In North Carolina during the early stages of the depression in 1931, the State legislature abolished the State's three principal institutions, the State university, agricultural and engineering college, and women's college as separate entities and unified them into a single institution, designated as the University of North Carolina. Separate boards formerly governing each institution were supplanted by a unified board for the consolidated university.

State government reorganizations.—Of far more significance to State universities and colleges were the reorganizations of State governments by legislatures during the depression. Previously the governing boards of the institutions were regarded as more or less independent entities within the governmental organization, occupying positions separate and distinct from the executive branch of the government. In the administration of the internal affairs of the institutions the boards had possessed more or less autonomous powers. With the reorganization of the State governments during the depression, however, changes occurred in their legal status. Powers of boards to administer certain phases of the institutions were transferred to State officials of the regular executive branch of the central government.

The State government reorganizations in general were of two types. One consisted of the department type, which provided for the consolidation either fully or partially of the existing offices, bureaus, divisions, institutions, boards, and commissions into a limited number of administrative departments under the governor as supreme head of the executive branch. The other provided for the retention of the old-type form of government organization with the centralization of financial supervision over the existing offices, bureaus, divisions, insti-

tutions, boards, and commissions in the governor or some other State executive officer or board.

Department type of organization.—In the department type of organization the governing boards of State universities and colleges were frequently consolidated in one of the administrative departments. The effect of this arrangement was that the positions of the institutions were radically changed and they became in reality component parts of the executive branch. In such cases the governing boards were made subject to the authority of the particular administrative department in which they were consolidated. In addition they came under the jurisdiction of other administrative departments. This was due to the fact that the reorganizations were along functional lines. Under this arrangement one department, such as the department of finance, was empowered to exercise supervision over the fiscal affairs of all the departments. Another department was vested with certain powers over the personnel and employees of all the departments. In the same manner one or more other departments were vested with authority to handle the purchasing, printing, construction, and like functions for all the departments. Thus the governing boards of the institutions included in an administrative department lost in part the final jurisdiction over phases of their affairs assigned to other State administrative departments.

Among the States which reorganized their governments into administrative departments during the depression, different plans were followed with respect to the State universities and colleges. One plan adopted by Georgia in 1931 and Maryland in 1932 provided for the consolidation in an administrative department of all the institutions of higher learning within the State. In the case of Georgia the State government was reorganized in 13 departments. One of the departments was designated as the "Board of regents of the university system of Georgia" and included all the State institutions of higher learning. An unusual arrangement was provided by the reorganization in Maryland. The government in this State was reorganized into 20 departments. The State university was consolidated in an administrative department known as the "State board of agriculture and regents of the University of Maryland." The teachers colleges were consolidated in another department—the department of education.

A second plan adopted by California, Illinois, Maine, Tennessee, and Vermont provided for the consolidation of all the institutions with the exception of the State university in the department of education as an administrative department. In a number of these States the reorganization laws enacted during the depression consisted of amendments to former acts reorganizing the State govern-

ments. Three other States reorganizing their governments into administrative departments adopted the plan of nominally attaching the governing boards of institutions to an administrative department. These States were Indiana, Kentucky, and Rhode Island, the reorganizations occurring in 1933, 1934-36, and 1936, respectively. Under the reorganization in Kentucky, all institutions were nominally attached to the department of education with the exception of the State's two Negro industrial colleges. The latter colleges were consolidated into this department which was headed by the State board of education. Several other States reorganized their governments into administrative departments during the depression, but allowed their universities and colleges to remain entirely without any administrative department. The position of these institutions in the State governmental set-up, therefore, was unchanged.

Centralized financial supervision.—State universities and colleges were affected to a larger extent by the type of government reorganization which consisted of retaining the old form of organization but centralizing financial supervision over the various governmental units in the Governor or some other State executive officer or board. The plan centered in the creation of a State budget system. The financial supervision comprised, generally, recommendation of the amounts to be appropriated by the State legislature to each governmental unit, including the State universities and colleges, reduction under certain contingencies of the State appropriations after being made, approval or disapproval of the expenditure of the appropriations, and similar regulation of financial affairs.

During the years 1930 to 1935, 15 States enacted laws providing for this type of government reorganization. These States were: Alabama, Arkansas, Iowa, Michigan, Mississippi, Missouri, New Hampshire, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Utah, West Virginia, and Wisconsin.

With the exception of three of these States—Michigan, New Hampshire, and Oklahoma—all State institutions of higher education within each State were included in the reorganizations. The boards governing them were thus placed under the financial supervision of the Governor or some other State central executive officer or board. In Michigan the boards governing the State university and the agricultural and mechanic arts colleges were specifically excluded. Similarly, the board governing the agricultural and mechanic arts college in Oklahoma was exempted from the central financial supervision, as was the board governing the State University in New Hampshire.

Laws affecting faculty members.—Of the various new laws enacted in States during depression years, the investment of authority in State central executive officials over the classification of State employees

and the fixing of salary schedules has affected most directly the faculty members of the State universities and colleges. Such legislation in many of the States was closely connected with the reorganization of State governments.

According to the general plan, a central executive official was empowered to classify all positions held by State officers and employees into grades defining titles, duties, qualifications, and fixing the salary schedules for each grade. As the legal provisions were applicable to positions of all State officers and employees,⁷ those of the faculty members of the State institutions of higher education, unless specifically exempted, were included and came under the jurisdiction of these officials. Some States varied from this general plan by conferring authority on the executive official to approve or disapprove the salaries paid State officers and employees, including any changes in their pay or to approve or disapprove any increase in the number employed.

The particular central executive official designated to exercise these powers varied in the several States. In most cases they were conferred on the officer or board heading the department of finance having control over fiscal affairs. Other State legislatures conferred them on the director of State budget agency or a council composed of executive officials, such as the Governor, secretary of state, treasurer, comptroller, or attorney general. The Governor as the State's chief executive was designated in a considerable number of States.

Among the States where laws of this type were adopted were Arkansas, California, Connecticut, New Mexico, North Carolina, and Tennessee. In Arkansas the Governor was empowered to approve or disapprove salaries of all State employees in what was first enacted by the State legislature as an emergency measure, but up to this time the law has not been repealed. The authority in California over classification of positions, salaries, and other phases of personnel was vested in the State director of finance heading the department of finance, but was applicable only to the teachers college. The State university was specifically exempted from such authority. In Connecticut the State legislature conferred authority on the central executive agency not only to classify the positions and fix salary schedules for the faculties of all the institutions, but also to approve or disapprove any additions to the staffs. In Tennessee the State university was not included under the law.

Fixing salaries of faculty members in appropriation acts.—Another plan designed to control the salaries of faculty members was where the State legislature itself assumed this responsibility rather than delegating it to State executive officials. This plan con-

⁷ Legal provisions were not applicable to State officers whose salaries were fixed by the State constitution or statute.

sisted of specifying the salaries to be paid to the various faculty members of the institutions in the annual or biennial appropriation act passed by the legislature when appropriating funds for their support.

Prior to the depression the appropriation made by the legislature for salaries and wages to the institutions was generally included in a single lump sum. Under this arrangement the governing board, with the advice of the president, distributed the lump sum among the faculty members and other employees of the institution fixing individual salaries and compensation. Instead of a lump sum, the State legislatures in adopting the plan listed separately each position in all academic departments of the institution and appropriated the exact amount⁸ of the salary to be paid for the fiscal year to the faculty member holding the position. The list in the appropriation act included all ranks of the faculty from the dean of the college to the assistant instructor.

Faculty members were affected in a number of ways by this plan of making appropriations. In the first place, their salaries were fixed at a certain amount by statute for the definite period covered by the appropriation act and could not be increased during the interim. In the second place, all the positions on the faculty were listed in the appropriation act with the result that it was impossible to add any new members irrespective of exigencies, except in the case of vacancies. A third phase of the situation was that the governing boards were deprived of one of their important administrative functions, the power to adjust salaries in accordance with the educational needs of the institutions. States in which the 1935 appropriation acts fixed the salaries of all faculty members of the institutions were Arkansas, Texas, and New York.

A matter of special interest in the case of New York was that a general law on the statute books already provided for the classification of staff members of the State's teachers colleges and normal schools into specific grades based on faculty rank and for the fixing of the salary scale for each grade. The appropriation act, therefore, in fixing the salary of each position on the faculties followed the salary scale as included in the general law. With respect to the other institutions for which appropriations are made in New York, this situation did not apply.

The legislature of two additional States adopted modifications of this plan of controlling faculty salaries by legislative appropriations whereby only the salaries of part of the faculty members of the institutions are fixed. A typical example was found in the case of the State College of Connecticut. The appropriation act contained separate items for the president's office, director of resident instruction, busi-

⁸ The salary specified in the appropriation act was a maximum amount, the governing board having discretionary power to pay a lower salary.

ness office, registrar's office, dean of men, and dean of women. The 35 academic departments making up the college were then listed and separate appropriations for each department were divided into three subitems, personnel service, contractual service, and supplies and equipment. In the appropriation act of 1935 for the teachers colleges of Maryland, the annual salaries to be paid the principal, assistant principal, registrar-business manager, head of department, and several minor employees in the administrative offices were segregated into separate items while the salaries of the teachers were grouped under a single item which specified the number to be employed.

In quite a number of other States, the legislature fixed the salary of the presidents of the institutions in the 1935 appropriation act. There were about 8 percent of the States where the appropriation act fixed the salaries of the presidents of all institutions within the State, while in an additional 8 percent the salaries of the presidents of the teachers colleges only were so specified.

Centralized control of printing of institutions.—Although a strong trend had previously developed, the centralization of authority over printing was another important phase of changes made in State administrative machinery during the depression affecting State universities and colleges.

To accomplish this, object different plans were adopted by the States, including the operation by the State of its own printing plant, the empowering of a central executive official or agency to handle the printing together with the making of contracts and execution of orders, or the vesting in the official or agency of the right to approve contracts for printing before they become effective. The particular executive official or agency designated to exercise jurisdiction over State printing varied in the individual States. Among the State officials or agencies were a State printer, superintendent of public printing, administrative department, division of purchasing and printing, printing commission, executive council, or purchasing agent.

Regardless of these aspects of the problem, the question of vital interest to State universities and colleges was the extent of the powers conferred on the central printing authority with respect to their publications. The printing of State universities and colleges involves bulletins, pamphlets, and similar circulars prepared by faculty members dealing with varied research work of a technical nature undertaken by them. In addition are the periodical reports of the institutions showing progress in their education functions.

In this connection some of the powers conferred on the official or agency by new laws in the several States included: (1) Determining whether publications or reports shall be printed; (2) editing, revising, condensing, or eliminating parts of publications or reports before printing; and (3) deciding the number of pages to be included in

periodical reports. In order that the central printing official or agency might exercise these powers, the institutions were required to submit the manuscripts of their proposed publications in advance.

Statutes were enacted between 1931 and 1935 in three States—Kentucky, Maine, and New Jersey—empowering a State central official or agency to determine whether publications or reports should be printed. A limitation was placed on the exercise of this power in New Jersey where the governing boards of the colleges were given the right of appeal to the Governor in case the central printing authority refused to print any publication or report. The wording of the laws differed in the several States. In some instances the central official or agency was given blanket power to approve or disapprove requisitions for printing while in others specific powers were conferred to determine whether the publications or reports should be printed.

There were six States in which laws were passed during the depression vesting power in a central printing official or agency either to edit, condense, revise, or eliminate parts of publications and reports of State universities and colleges. These States were Illinois, Kentucky, Mississippi, New Jersey, Tennessee, and Wisconsin. Two of the States—Illinois and Wisconsin—exempted the State university from any control over their publications. In three of the States—Mississippi, New Jersey, and Tennessee—the central printing authority was empowered to edit, revise, or condense only the periodical reports of the institutions and not publications of other types. The State legislatures in Virginia and Wisconsin placed certain restrictions on the central official or agency. In Virginia the governing boards of the institutions were entitled to appeal to the Governor in case any matter was eliminated from their publications and reports which was regarded as essential to the text. In Wisconsin whenever the contents of publications or reports of the institutions were regarded by the central official or agency as inappropriate, the manuscript had to be returned to the author for revision.

State legislatures in five States—Illinois, Kentucky, Mississippi, Vermont, and Wisconsin—vested powers in the State printing authority to determine the number of pages to be included in the reports of the institutions. Under this arrangement the contents of the reports might be indirectly affected through the limitation of the pages to be printed.

STUDY BY THE SPECIAL COMMITTEE OF THE AMERICAN ASSOCIATION OF UNIVERSITY PROFESSORS

In recognition of the seriousness of the situation the American Association of University Professors appointed a special committee to study the effects of the depression and recovery upon higher education. This committee secured a grant from one of the foundations to help

finance its activities. Prof. F. K. Richtmyer, of Cornell University, is the chairman of this committee. The committee employed Dean M. M. Willey, of the University of Minnesota, as director of its studies. The Office of Education has cooperated with the committee. The preliminary reports of this committee are appearing from time to time in the bulletin of the American Association of University Professors and a full 500-page report is promised. When completed these studies will constitute a comprehensive analysis of the effects of the depression. Since this committee has connections with groups of professors in a large number of colleges and universities through which they can secure not only quantitative information but reports of changed attitudes, effects upon morale, and the like, their completed report is looked forward to with keen interest.

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CHAPTER 7

UNITED STATES DEPARTMENT OF THE INTERIOR
HAROLD L. ICKES : SECRETARY
OFFICE OF EDUCATION : J. W. STUDEBAKER
COMMISSIONER

A SURVEY OF A DECENNIUM
OF EDUCATION IN COUNTRIES OTHER
THAN THE UNITED STATES

BEING CHAPTER VII OF VOLUME I OF THE
BIENNIAL SURVEY OF EDUCATION IN THE
UNITED STATES : 1934-36



BULLETIN, 1937, No. 2

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BY

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FOREWORD

The purpose of the Biennial Survey of Education in the United States is to present to the people of this Nation a picture, as complete and accurate as possible, of the many types of education they finance, administer, and maintain. But this isolated picture is not enough. The worth, activity, and progress of any system of schools are relative matters and must be shown along with like phases of other systems to provide sane conceptions and sound bases for judgments. To afford such bases for comparisons the Office of Education has throughout its existence published in its annual reports, biennial surveys, bulletins, and pamphlets, accounts of education in other countries. This chapter of the Biennial Survey for 1934-36 is in continuation of that policy. It attempts to point out the differing directions in which education in other countries has been going in the past decade in the hope that from them we in the United States may be better able to select the educational paths that will lead in this country to the strengthening and perpetuation of good ways of living.

BESS GOODYKOONTZ

Assistant Commissioner of Education

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CHAPTER VII

A SURVEY OF A DECENNIUM OF EDUCATION IN COUNTRIES OTHER THAN THE UNITED STATES

A survey of the trends of education in other countries for the years 1924 to 1926, which included to some extent post-war happenings to those dates, was prepared and published by the Office of Education in 1928.¹ The intention then was to issue similar accounts regularly with each biennial survey of education in the United States. Many other duties and some difficulties intervened to prevent carrying out the plan and it was not until about 1936 that the way seemed clear to pick up the thread of the earlier account and again weave into the fabric of educational documentation in the United States a sketch of education movements abroad. This study is an attempt to do that. It is presented in the hope that at intervals corresponding to the larger swings of world affairs, the story may be continued in such a way as to provide a progressive historical summary of education trends and events.

The decade here dealt with was a stirring one. In its first 3 years human life seemed everywhere on the ascendant. Intercourse among nations, manufacturing, building, commerce, trade, exploration, research, and investigation were moving rapidly to levels not before known in human experience. Then came 3 years of decline so severe that by 1932 the only peoples not seriously affected were those few so far removed from participation in the general life of the world that they had felt nothing of the preceding upsurge. In the last 4 years the economic swing has again been upward.

Coincident with these economic changes were revolutions peaceful and otherwise but important in either case, many changes in forms of government, the application of different philosophies of life, and a general questioning of the worth of much that had been held to be fundamental in all human relations.

Organized education felt the impact of all these movements probably more than it ever has before because education in recent years has been more closely connected with life out of the schools than it has for some centuries and was consequently more susceptible of being influenced. To present a broad view of the larger effects of those impacts, or resistance to them as the case may have been, is the purpose of this bulletin. The immediate results of the depression are not here emphasized; they are the subject of an earlier publi-

¹ Abel, James F. Major trends of education in other countries. Washington, U. S. Department of the Interior, Office of Education, Bulletin 1928, No. 13.

ation.² Curtailed budgets, reduced salaries and personnel, smaller capital outlays for schools, are all important of course, but they are not so significant as changes in the concept of history and how it is to be taught to young people, whether education is to be used as a means of making good human beings or a particular type of thinker which those in control of the State desire at the time, or whether the administration and direction of education is to be strongly centralized in a small group of people who can easily have a mistaken conception of what is best for the Nation. It is these vital questions which in one form or another have been connected with organized education since its beginning, that are mainly considered in the following pages.

² Abel, James F. The effects of the economic depression on education in other countries. Washington, U. S. Department of the Interior, Office of Education, Bulletin 1933, No. 14.

SECTION I. EUROPE

MARKED CHANGES IN EDUCATION SYSTEMS

Twenty-one European countries changed their education systems markedly during the decennium¹ under review. They were: Albania in 1933; Austria, 1934; Belgium, 1931-32; Bulgaria, 1934; Czechoslovakia, 1930; Denmark, 1932 and later; England, beginning with 1926; Estonia, 1934; France, 1930; Germany, 1933; Hungary, 1934; Italy, beginning in 1923; Latvia, 1934; Norway, 1935; Poland, 1932; Portugal, 1935-36; Rumania, 1934; Scotland, 1929; Soviet Union, 1928 and later; Spain, 1931-32; Sweden, 1927; and Yugoslavia, 1929.

Education and revolution.—In six of these countries the changes in education were coincident with general revolutionary movements that resulted in setting up new national governments which, shortly after coming into power, redirected education policies. The Austrian constitution which went into force on May 1, 1934, declares Austria to be a federal state corporatively ordered and education there took on some of the characteristics being given it by corporative states. The *coup d'état* of May 1934 in Bulgaria and the attempt to establish a corporative state greatly affected education in that country. The National Socialist German Workers' Party which took control of Germany in 1933 is changing German education to suit its own purposes. An authoritarian government was established in Latvia in May of 1934 and by July of that year had passed a new law on public instruction. Its *Estado Novo* constitution of March 1933 made Portugal also a corporative state and the education reforms of 1935-36 are directly due to that. The second Spanish republic was proclaimed April 14, 1931; its government immediately entered upon an ambitious program of educational reform. The adoption of the first 5-year plan, a revolution in itself, by the Soviet Union in 1928 was the signal for greatly extended and intensive education activity mainly along the lines begun when the Union was formed. About the time the second 5-year plan was entered upon, 1932-33, it became evident that quality rather than quantity in education had to be emphasized and some drastic changes in policy were made.

Carefully planned changes.—In contrast with the pronounced, sudden swings in education activities were the long-planned, deliberately considered actions progressively made effective in other coun-

¹ Approximately 1926 to 1935, inclusive.

tries. The Consultative Committee of the Board of Education of England and Wales conducted inquiries for 2 years before it rendered its final report in 1926 on *The Education of the Adolescent*. Since 1926 education in England is being steadily reconstructed along the lines suggested in the report. The government of Czechoslovakia made changes in the schools only after careful study and considerable experimentation. Doing away with fees in the public secondary schools of France was carried out rather gradually. In Norway a commission appointed in 1922 presented a report in 1927. The plan it proposed was the subject of much discussion and not until March 1934 was the project of a law placed before the Storting, and from that project a law was passed in 1935. The Polish education law of March 11, 1932, was the product of extensive study by a ministerial commission composed of specialists in the different fields of education. The Swedish law presented to the Riksdag in February 1927 and passed the following May was based on 8 years of study and public discussion. Plainly, the peoples of most of the European nations prefer to make their education adaptations slowly and after mature consideration.

LESSER CHANGES

The seven other European countries, Finland, Greece, the Irish Free State, Lithuania, Luxembourg, The Netherlands, and Switzerland changed their school systems some, of course, but in comparatively minor respects.

NATIONALIZATION OF EDUCATION

Overwhelmingly in the direction of nationalization of education were the education movements of the past decade. The spirit of intense nationalism that has been rampant throughout much of the world has naturally shown itself in cultural as well as political and economic movements. Superficially the trend in education is indicated by the fact that in Italy in September 1929 the ministry of public instruction became the ministry of national education; in France in June 1932 the ministry of public instruction and fine arts was changed to the ministry of national education; in Belgium in December of 1932 the ministry of sciences and of arts became the ministry of public instruction; in Portugal in 1935 the ministry of public instruction became the ministry of national education; and the Rumanian ministry of public instruction and cults was changed in November 1936 to a ministry of national education. A Federal ministry for science, education, and popular culture (Reichsministerium für Wissenschaft, Erziehung und Volksbildung) was created in Germany on May 1, 1934, and its fields of activity assigned by decree of the following May 11.

In a decennium that marks the centenaries of the founding of several important public-school systems, those people who believe that education is a public function and have earnestly and honestly striven to make it so, find their hopes being fulfilled and their efforts rewarded, for nations in general have been rapidly taking wider and closer control of their cultural institutions, but not always in the way that advocates of public education desire.

Public and private education.—Nationalization of education has many aspects and manifests itself in various forms. One of them is the swing from private to public education. The economic crisis forced some of this. Many private schools closed because they could not find the money to keep their doors open and the students went to swell the increasing numbers in public institutions. Others remained open only by accepting grants from public funds and the public regulation consequent to such grants. More of the change was due to drastic government action. To 1933 education in Albania was provided mainly by private organizations many of whose schools received subsidies from government funds. The Albanian authorities, feeling that this prevented the development of an Albanian national public-school system, changed certain articles of the constitution in April of 1933 and shortly afterward passed a law that had the effect of doing away with all private schools in Albania. The right of religious bodies in Spain to conduct schools was abrogated by the Cortes in 1932 and the government undertook to replace the private schools with public.

Private education continues and plays an important role in most European countries but it is being brought more and more under government regulation. Law of May 20, 1933, in Denmark provides, among other things, for national supervision of private primary schools under certain conditions. By law of July 12, 1934, private schools may carry on in Latvia but their purposes and activities must be in accord with the national principles expressed in public education. Private and religious schools came increasingly under direct national authority in Lithuania. The gradual suppression of private schools begun in Norway in 1920 is now virtually accomplished. Private schools in Yugoslavia must submit to national control. Throughout Europe public as opposed to private direction of education is being strengthened.

National administration and support.—Another phase of the nationalization of education is the placing of more of the support and administration of schools in the hands of national officials and leaving less of it with the local authorities. Much of this has been going on in Europe in the past decade. Some of it also was due to the depression. Localities found themselves unable to raise school moneys by taxation and turned to the national treasury for help. National

budgets for education were generally cut, in some countries heavily for 2 to 4 years in succession, and the national government in order to use the depleted funds to the best advantage had either to take entire control of the schools or strictly supervise the local officials.

By law of January 22, 1931, the national treasury of Belgium took over the salaries of all the secondary school personnel. In Bulgaria, decree law of July 13, 1934, took away from the communal school commissions the power to select teachers; made the commissions appointive instead of elective as they had been, and in other ways simplified and centralized the administration of primary schools. Danish moves in this direction include lessening the influence of the rector of the church in the local and provincial school commissions and bringing the urban schools directly under the ministry of education which approves their plans and names the teachers. In Estonia also, control of the selection of primary teachers was placed in the education ministry. Even in Switzerland where tradition and sentiment are against national control of education and there is no federal ministry of education, the central government increased its participation in and control of certain education matters.

Education administration in the Soviet Union, previously placed in each constituent republic of the Union, came more and more under Union control. A central commissariat of public instruction has not been established, but at Moscow the commissariat of the Russian Soviet Republic tends to assume federal functions. The government is taking the place of the communist party in unifying education and the Union treasury is bearing a greater share of education expenditures.

Unifying control of different types of education.—Still another move in the nationalization of education lies in placing schools of different types within the purview of one ministry. For a long time the practice has been to assign to the ministry of public instruction only schools of general education. Agricultural education was directed by the ministry of agriculture; technical by the ministry of labor; war and naval schools, by the ministry of national defense, etc. The tendency in this decade has been to unite as much as possible all types of education, except that for national defense, to correlate them more closely, and to place them under one central administration. Thus, in Belgium when the ministry of sciences and of arts changed its name in 1932 to the ministry of public instruction, an office of technical education was set up within it to handle technical and vocational, and agricultural and horticultural education. The ministries of labor and of agriculture now have a voice in these aspects of education only through the office of technical education. A similar attempt in Bulgaria failed but the controversy resulted

in the appointment of an interministerial commission to assure as far as possible unity of instruction.

The ministry of science, arts, and popular education of Prussia by the crisis ordinance of October 29, 1932, took over most of the duties of the ministry of social welfare which was disbanded; and further was given control of many schools of commerce, agriculture, veterinary studies, household economics, and similar subjects, that had formerly been under other ministries. Agricultural schools in Poland were transferred, beginning July 1, 1932, from the ministry of agriculture to the ministry of cults and public instruction. About the same time the ministries of commerce, agriculture, and public works in Portugal relinquished to the ministry of public instruction control of technical education.

The Soviet Union presents an exception to this trend particularly with respect to higher education. In July 1928, six technical institutes and five tecnica were transferred to the administration of the council of national economy, and two institutes to the commissariat of transport. In July 1930 a general law was passed which transfers from the commissariats of public instruction in the different republics the technical schools to the Union industrial commissariats, the agricultural schools to the Union and the republics' commissariats of agriculture, and the medical institutes to the commissariats of health. This move however resulted in greater central control of technical education for in October 1933, a federal committee of higher technical education was created to take general direction and control of technical education throughout the Union.

The unity school or unified school system.—The unity or unified school, differently understood and conceived in different countries, lends itself nicely to the nationalization of education. "Differently understood and conceived in different countries" expresses the situation because an action toward a better unified system considered as a very important movement in Norway or Sweden, for instance, where education has long been well organized, would be inconsequential or impossible in Rumania, for example, where in 1919 four widely varying types of education organization found themselves compelled to carry on under a common national government, or in Poland, Czechoslovakia, and Yugoslavia where similar situations existed.

A basic principle of the unity school is equal educational opportunity for equal intelligence without regard to the social, class, or economic status of the students. The nation undertakes to assure for the supernormal child from any condition of life a training suited to his natural capacities, and to any less gifted child education is to be meted out according to his abilities and needs. Such a concept led in France to making much easier the transfer of pupils from the

primary to the secondary school classes, and later the progressive abolition of fees in all public secondary schools. The implications of the principle are wide. They call for an intimate knowing of every child in the realm on the one hand, comprehensive knowledge in detail of the entire economic and social aspects of the country on the other, and an education scheme so complete and well-rounded that it can fit the individual advantageously into the nation's life.

Some Bulgarian authorities claim that their country has the only unified school system in Europe. The claim is based on the fact that all children, rich and poor alike, must attend the primary school and that secondary schools and universities are provided for all who are capable of going further. Norwegian authorities also claim for their country a unified school in the sense that admission to a secondary school is possible only after 7 years of primary instruction. The 1932 reform of education in Poland is hailed as bringing about a unified school system. The Czechoslovakian reforms of 1930 were considerably in the direction of providing closer connection between primary and secondary education.

Law No. XI of 1934 in Hungary did away with the three or four types of secondary schools then existing and substituted one type in which the four lower classes have a common program; in the four upper classes pupils have a choice according to their aptitudes. Unifying secondary schools in Yugoslavia was undertaken with considerable success in 1929. Many secondary schools in Belgium have recently been enlarged and new schools established for both boys and girls to the end that the imbalance between primary and secondary instruction in that country be overcome, and considerable effort toward democratizing education was made in the way of remitting secondary school fees and providing funds for the better endowed children of poor parents. The main steps toward a unity school system in Spain under the second republic were in the direction of providing public primary education for the masses of the people.

EXTREME NATIONALIZATION OF EDUCATION

A usual concept of nationalization of education pictures the national government in power at the time as taking control of all education within the boundaries of its territory and using the schools of all types and levels to promote and perpetuate its political and economic theories and practices. Freedom of teaching ceases. The state, not the individual, is of paramount importance; making citizens of the kind desired by the government, not making good human beings, is the ultimate purpose. This concept arises from the strong impressions, both antagonistic and favorable, created by the Gentile reforms of 1923 in Italy and their progress in the subsequent years,

the adaptation of education to communism in the Soviet Union, and the more recent control taken of education by the National Socialist German Workers' Party.

Italy.—Good accounts² of the reform of education in Italy are available; the story need not be retold here. The administration, the organization of instruction, and the spirit and ideals of education were all changed. The last of these commands attention as the extreme of nationalization. They were expressed by the prime minister as follows:

The Government demands that the school should be inspired by the ideals of Fascism; it demands that it should be not merely not hostile to Fascism but in no way out of sympathy with it or indifferent to it; and it demands that the whole school system in every grade and every phase of its teaching should educate Italian youth to understand Fascism, to renew themselves in Fascism and to live in the historic atmosphere created by the Fascist revolution.

Soviet Union.—The communist regime of education in the Soviet Union is also fairly well documented³ in English. The administration, organization of instruction, and the spirit of the teaching were virtually reversed. The strong central control held by the ministry of public instruction during the czarist regime was presumably set aside and each republic was made responsible for education within its borders. Still, considerable central direction was maintained by the communist party. All the former types of schools were replaced by others offering a very different kind of instruction, organized differently and animated by a spirit opposed to that which prevailed in the imperialist institutions. Few nations have undertaken so original and comprehensive a program of training for children and adults alike or borne it along so far.

Though the efforts to make the schools a means of spreading and perpetuating communism were vigorous and continuous, eventually

² Codignola, E. The philosophy underlying the National system of education in Italy. In *Educational Yearbook of the International Institute of Teachers College*, Columbia University, 1929. New York, Bureau of Publications, Teachers College, 1930.

Lazzari, Marino. Education in Italy. In *The Year Book of Education 1932*. London, Evans Brothers Limited, 1932.

Marraro, Howard R. New Education in Italy. New York, S. F. Vanni, Inc., 1936, 525 pp.

³ Handbook of the Soviet Union. New York, American-Russian Chamber of Commerce, 1936, 562 pp.

Hans, N. Education in Soviet Russia. In *The Year Book of Education 1933*. London, Evans Brothers Limited, 1933.

Education in Soviet Russia 1931-34. In *The Year Book of Education 1935*. London, Evans Brothers Limited, 1935.

Lodge, Nucla P. Higher education in Soviet Russia and the new student. In *Educational Yearbook of the International Institute of Teachers College*, Columbia University, 1934. New York, Bureau of Publications, Teachers College, 1934.

Pinkevitch, Albert P.. The new education in the Soviet Republic. New York, The John Day Company, 1929, 403 pp.

they had to give way to the claims of broader education. Trained leaders in industry and trade were sorely needed so the universities were gradually re-established as institutions of higher learning and their research and teaching work united. To obtain fit students competitive examinations had to take the place of class selection, and knowledge of political grammar became less important than knowledge of the sciences. The programs of 1927 did away with the complex teaching method based on labor, nature, and society and brought back the regular study subjects, literature, foreign languages, mathematics, science, etc. At the same time the primary schools turned again to reading, writing, and arithmetic taught in an organized way by a definite program.

The cultural 5-year plan taken up in 1928 to some extent stopped this return to standard forms of education. The economic 5-year plan called for thousands of skilled workers, foremen, engineers, technicians, agriculturalists, electricians, miners, etc., to carry it to completion. At the same time further liquidation of illiteracy and the general introduction of compulsory education were undertaken. Most of the higher grades of the general secondary schools were changed into technical and higher technical institutes; the accommodation in all kinds of schools had to be doubled and trebled, and thousands of new teachers had to be employed.

The drive for quantity production in education brought deterioration in quality and about 1932 the government deliberately slowed down the rate of growth, reestablished the complete secondary school of general education, and on May 16, 1934, published a new statute for primary and secondary schools that brings them well into line with practices in other countries. Later, directors and teachers in secondary schools were given full authority over the students, student uniforms were again required, student self-government is strictly limited to student activities, and communistic doctrine has a much less important place in the curriculum.

Germany.—"National-socialist education is based on the principle of political education. Political education is neither a new form of instruction nor even new subject matter to be taught; it should be envisaged as the expression of all the efforts tending to place education in the closest rapport with the State and the people. It is the State and the people which give to every cultural institution and to every pedagogical action its sense and its direction. * * * National-socialism, based exclusively on the political conception of the world, should necessarily exert itself in the first place to master men, the reform of institutions not presenting later any difficulty. It is not therefore surprising that the reorganization of education was begun with the teaching corps and the youth," is an expression of the

underlying spirit of and the first moves in the redirecting of education in Germany by the National Socialist Party.¹

The types of schools, the programs of study in them, the internal organization of the institutions, and other formal aspects were not greatly changed in Germany. Such a radical upsetting of all institutions as occurred in the Soviet Union, or even the more deliberate changes that were made in Italy, were not undertaken. The Nazi leaders began with the teachers and brought them into a general National-sozialistischer Lehrerbund so that the entire body of German educators would be in line with the party's policies. Next, the children were organized in the Hitlerian youth. Then came the changes in the spirit of education. They were not a break with history, with all the past, as in the Soviet Union, but a return to the past, a revival of a historic concept, much as they were in Italy.

The ministry of the interior, then the leading education ministry in Germany, laid down the principle that—

The supreme task of the school is the education of the youth for the service of the Nation and the State in a National-socialistic spirit. Anything that favors such education should be encouraged, anything that endangers it should be avoided and fought.

Briefly, that National-socialistic spirit means the return of Germany to the place in world affairs that it held previous to the world war and is to be accomplished by racial purity, the expulsion or subordination of all non-Aryan elements in the population, unification of the German people under one leader with absolute authority, strict discipline in all walks of life, careful physical training as a basis for military training, and reverence for the national heritage and the national heroes.

To attain these ends the director of the school is given full authority over his institution; he may control and discipline the pupils about as he sees fit; he alone is held responsible for the school's functioning. Heredity and race knowledge is a subject of instruction; history is taught with special emphasis on Nordic superiority; school journeys abroad are forbidden but journeys within Germany are encouraged; city children spend a year in the country; graduates of secondary schools who would enter universities must first give a year to labor service; the number of women university students is reduced; and a Federal Ministry of Science, Education, and

¹ *Annuaire International de l'éducation et de l'enseignement 1934*. Genève, Bureau International d'Éducation, 1934.

Other references are:

Kandel, I. L. *The making of Nazis*. ^o *In Educational Yearbook of the International Institute of Teachers College, Columbia University 1934*. New York, Bureau of Publications, Teachers College, 1934.

Education in Nazi Germany. *In Annals of the American Academy of Political and Social Science*, November 1935.

Popular Culture established May 1, 1934, now has control of all aspects of education in the Reich.

LONGER TRAINING FOR MORE PEOPLE

Throughout the decade the European countries progressively increased the number and percentage of people, young and old, receiving some kind of formal instruction. This was brought about by better enforcement of school attendance laws, increasing the term of compulsory education, the remaining in school of large numbers of young people who were unable to find employment, sustained efforts to reduce illiteracy in countries where the illiteracy rate was high, provision of better opportunities for technical and vocational education, training of the unemployed, attempts to create a better spirit of National unity, and the use of the cinema and radio both in schoolrooms and in popular instruction without the schools.

Obligatory instruction and the reduction or prevention of illiteracy are complementary activities. To be able to enforce its compulsory education laws, the government of Albania has yearly added to the number of primary schools, arranged *internats* (boarding schools) for poor children in the mountain districts, and made more provision for the education of girls. The Belgian authorities bettered the enforcement of compulsory schooling for children of parents without fixed residence, and for physically and mentally infirm children.

By decree of May 25, 1934, the final age for obligatory instruction in Estonia was fixed at completion of the primary-school curriculum, normally 14 years of age. Children who reach 14 in the first semester of the school year may leave at the close of the previous year; those who attain it during the second semester must continue to the close of the year. Formerly all children who had not completed the primary-school were compelled to attend to the age of 16. The change was made to avoid difficulties within the schools and because many parents needed the help of their children who were 14 or older. In Finland obligatory primary instruction of 6 years plus 2 years of post-primary for children not continuing their studies in any other way was in force in the cities by 1931. It is planned to be fully effective in rural districts by 1937.

School attendance in France was made compulsory for all children from 6 to 14 years of age by a law signed by the President August 9, 1936. The labor laws were also modified making it henceforth illegal for children under the age of 14 to be employed in commercial and industrial establishments even in the capacity of apprentices. In general this represents an addition of 1 year to compulsory education in France.

The school-leaving age in Scotland was raised from 14 to 15, effective September 1, 1939, by the Education (Scotland) Act, 1936, and the minimum age for exemption from school under employment certificates was lifted from 12 to 14. The new school-leaving age law in England is very similar to that in Scotland. On May 20, 1936, an enactment in Sweden changed the 6-year elementary school which had met the full-time requirement of compulsory education since 1842, to a 7-year school. A 12-year period is allowed to make the transition from the one type to the other.

Obligatory full-time attendance of 6 years in Hungary is being extended to 8 years as fast as schools can be provided. Progress in this direction was slowed by the depression. The Irish Free State school attendance act for children between 6 and 14 years of age became operative on January 1, 1927. The effects are showing in steadily increasing attendance in the upper grades of the elementary schools. An interdepartmental committee recently appointed to study the question of raising the school-leaving age reported that it is impracticable to compel children in rural areas of the Free State to attend whole-time schools to the age of 16.

One of the chief characteristics of the present educational regime in Italy is its constant insistence on obligatory education and the provision of enough schools for all the children. The 7 years of obligatory schooling that Polish authorities desire throughout the country have not yet been reached in some areas but good progress is being made especially since the reform of 1932.

Spain and the Union of Soviet Republics made remarkable attempts to extend primary education to all children of compulsory school age. The government of the Second Spanish Republic projected in 1931 a plan for creating 27,151 new schools in 5 years and providing teachers for them. The budget of the ministry of public instruction was increased for 1931 and the 3 succeeding years and, although the project was not carried to completion, many thousands of new teaching positions were created, new buildings were erected, and new schools opened.

Officials of the Union of Soviet Republics claim that by the close of 1932 preschool institutions embraced one-fourth of the children between 3 and 7 years of age; the 4-year elementary school course was attended by 98 percent of children of that school age; and the 7-year course, made obligatory in 1930 under the second 5-year plan, held more than two-thirds of the children of an age to attend it. Comparative data for the 2 years 1927-28 and 1934-35 are:⁵

⁵ Handbook of the Soviet Union. New York, American-Russian Chamber of Commerce, 1936.

Type of school	Number of students	
	1927-28	1934-35
Preschool institutions	308,000	6,506,000
Elementary schools (total)	11,356,000	24,036,000
Primary (first to fourth year)	9,947,000	18,538,000
Intermediate and secondary (fifth to tenth year)	1,409,000	5,498,000

REDUCTION OF ILLITERACY

Campaigns to reduce illiteracy among adults and adolescent youth were not necessary and of course were not undertaken in Norway, Sweden, Denmark, Germany, Netherlands, Belgium, England and Scotland, France, Switzerland, Luxembourg, Austria, and Hungary. Illiteracy had long been of proportions small enough in those countries to require only that it be kept down and in some cases reduced by careful enforcement of the compulsory education laws.

The other European countries were not in that position. The illiteracy rate was high in Italy in 1923 when the Gentile reforms included a campaign to eradicate it. There has been no cessation in that drive and by 1935 the government felt that the "social malady" of illiteracy was definitely overcome.

The first 5-year plan in the Soviet Union included a project for teaching 18,200,000 illiterates. Official reports placed literacy at 58.4 percent when the work began, and at 90 percent in 1932. The following is a recent statement of the situation:

Many of the smaller nationalities in the country in prewar times had no written languages. What few schools existed were conducted in the Russian language. The Government has aided the minor nationalities to develop their national culture. Philologists have worked out alphabets for a number of those nationalities which previously had none. In the Russian Republic 40 new alphabets have been introduced. By the end of 1932 out of 182 nationalities 134 had their own national written language. Latinization of the national alphabets has also been widely introduced; by the end of 1932 over 70 nationalities had adopted the Latin alphabet.

This has played a large role in eradicating illiteracy. For example, among the ~~Turkomans~~ in 1925, prior to Latinization, there were only 2 percent literates; in 1932 there were 61 percent. Corresponding figures for Uzbekistan and Tadzhikistan are: 2 and 72 percent and 1.5 and 52 percent. Similar progress has been made among the Cossacks, Tatars, Kalmyks, Buryats and other minor nationalities. The more cultured peoples have achieved close to 100 percent literacy and have not only elementary but secondary and higher educational institutions in their own languages. Elementary schools are conducted in 70 different languages in the Union of Soviet Republics.

It is expected that adult illiteracy will be virtually eliminated within a short time. While the number of persons attending "anti-illiteracy" courses is scheduled to show a continual decline, the number attending courses for semi-literates is expected to increase from 6,471,000 in 1932 to 9,000,000 in 1937.

* Handbook of the Soviet Union. New York, American-Russian Chamber of Commerce, 1936.

Growth of literacy

	1928	1930	1932
1. Literacy, population between 8 and 50 years (percent) -----	58.4	67.3	90.0
Urban -----	78.5	83.9	97.0
Rural -----	48.3	62.1	88.0
2. Attendance at literacy courses (thousands) :			
Courses for semilliterates -----		6,970.2	6,471.0
Courses for illiterates -----	1,315.0	6,981.8	7,170.0

The Irish Free State, Albania, Czechoslovakia, Poland, Portugal, Rumania, and Spain made special efforts to reduce illiteracy among their peoples.

ADULT EDUCATION

In the past 16 years probably no other phase of human training has been stimulated more, has spread more widely, and taken on more different aspects than adult education. The World War, while in progress, gave it a startling impetus by showing how rapidly adults can be trained to do things to which they are unaccustomed; at its close millions of men both sound and maimed were turned back to civilian life and large numbers of them had to be refitted for civilian pursuits. Psychology came forward to prove by experiment that adults can learn as easily and rapidly as young people. The intense trade and industrial activity from 1926 to 1930 required the employment of many who had to be trained while in service. The depression brought unemployment for millions and some provision had to be made to occupy their idle time; "Education for leisure" became a slogan. The radio and the cinema opened wonderful possibilities in the way of mass instruction and many attempts successful and unsuccessful were made to use them. The new central governments of the nations created or recreated after the World War felt that they had to weld together the diverse elements in their populations and used various forms of adult education to do it. Dictator governments had of necessity to reach their citizens in all walks of life and they too set up various programs for instructing adults in the aims and policies of the government and the schemes of living that would make them effective. Obligatory part-time schooling following the period of obligatory full-time instruction was adopted in several countries.

Libraries and museums extended their services and caught and held the interest of more people. Workers' organizations undertook to train their members. Associations such as the Young Men's and Young Women's Christian Associations made stronger efforts to offer planned courses and instruction to adults. The extent to which adults were invited and encouraged to join in educational group undertakings was remarkable. The significant features of the movement were that it grew from and appealed to people of the lower

income brackets, and their main interest was and is in the cultural and social science studies.

Much of this adult education was initiated and carried on by private effort though public institutions aided and encouraged it. A large amount received grants from public funds. In three countries—the Soviet Union, Italy, and Germany—adult education was taken over by the national government and is directed by it.

The English system is typical of those in which it is recognized as an essential part of the education system, is aided from public funds, and is left free of partisan political influence.

England.—Adult education is an old, well-organized, and nationally aided activity in England. From the establishment of the first strictly adult school in 1798 through the later growth of mechanics' institutes and people's colleges, the formation in 1903 of the Workers' Educational Association, and the university extension and tutorial class movements, to the code for evening continuation schools in 1893 when assistance from public funds was first provided, it has been a serious business somewhat more closely connected with the regular school system than in many other countries.

The Board of Education issued a body of regulations for it in 1924, widened the scope of those rules in 1931, reduced the grant in 1932 to be in effect for the following 2 years, resumed expansion for the year 1934-35, and later removed all restrictions on the natural growth of courses and classes and completely restored the 10 percent reduction in teachers' salaries. The Board reports that on July 31, 1935, there were 783 tutorial classes (preparatory, 3-year, and advanced) with an attendance of 13,889; 1,359 1-year, terminal, and short terminal courses with 27,468 attending; 370 university extension and short extension courses with 7,857; 13 vacation courses, 1,453; and 5 residential colleges with 120 students. The government looks with favor on any institution that raises the standard of citizenship and of general culture and, while it supervises the activities of those organizations to which it gives grants for adult education, it does not interfere with their political or partisan points of view.

Belgium.—Schools for adults are optional in Belgium; the communes may or may not establish them as they see fit. If the local public authorities do set up adult schools, the central government grants a subsidy. Schools of general education for adults come within the ministry of public instruction; the ministries of agriculture and of labor also aid adult schools in their respective fields. Independent organizations may also provide schools and courses for adults, and in Belgium these organizations are usually either closely allied with or distinctly antagonistic to the church. In any case the schools, whether public or independent, are given funds from the

national treasury without regard to their religious connections or political affiliations.

A higher council of popular education (Conseil supérieur de l'éducation populaire) was created by law of April 30, 1929. It is a consultative body attached to the ministry of public instruction to suggest to the government any measures it may consider favorable to popular education and to assure a better use of leisure by workers. The spending of any national funds appropriated for popular education is largely determined on the advice of the council.

Other countries.—The governments of the Scandinavian countries, of Holland, Czechoslovakia, Poland, and Austria subsidize adult education but without attempting to give it a political bias, and during the decade made no special moves in that direction. Austria may be an exception due to the political events in February and July of 1934.

Italy.—The governments of Italy, the Union of Soviet Republics, and Germany took close control of the educational activities of adults, even closer probably than they did of other forms of education. By royal decrees of May 1, 1925, and November 11, 1926, Opera Nazionale Dopolavoro was organized in Italy "to promote the sane and profitable employment of the leisure hours of workers by means of institutions designed to further the development of their physical, intellectual, and moral capacities." Control of Dopolavoro is in an extraordinary commission under the supervision of the ministry of corporations. The organization extends throughout Italy and works in a wide range of fields. Sports and excursions are encouraged for their educational value and to train athletes, mountaineers, and skiers for use in future wars. Artistic education includes folklore, the theater and traveling theaters, the radio, bands and schools of music, and the cinema. Many courses in technical instruction and in agriculture are offered. Colonies and camps on the seashore and in the mountains are arranged. Savings books and facilities for purchasing food and goods at reduced prices are provided. Even schemes of insurance and house purchase are worked out for members.

From 1,064 locals with a membership of 280,584 in 1926, the organization grew to 17,809 clubs with 1,775,570 members in 1932. Dopolavoro is continuing to grow not only in membership but in the various forms of activities it undertakes.

Union of Soviet Republics.—Besides the movement to reduce illiteracy (see page 14), the Soviet Union continued and increased its efforts to develop literacy in the broader sense through more newspapers, libraries, clubs, reading rooms, motion pictures and theaters, the radio, museums, and wider publication of books. The political education branch of the education system, set up shortly after the

revolution to train party workers continued to function throughout the decade on the three levels of schools of political grammar for the rank and file, Soviet party schools for agitator-propagandists, and communist universities for party leaders. Attendance at them has been compulsory for members of the party since 1924.

Germany.—Adult education in Germany from 1926 to 1935 required no campaigns against illiteracy, no extensive founding of new schools, no special increase in the number of newspapers published, and no greater widening of cultural agencies. The Germans are and long have been a literate people with well-developed educational and cultural institutions. A survey of German adult education in 1929⁷ showed that it was carried on by religious and political groups like the Catholics, Protestants, Socialists, and Nationalists; institutions, such as labor colleges, based on economic conditions; central institutions which included people's high schools somewhat similar to those in Denmark, people's high-school homes, and adult evening schools; and a large number of public libraries. All this work was generally favored by the national and state governments and was to some extent subsidized by them.

With the establishment of the Nazi regime, adult education in nearly every form was taken over by the national government and directed toward Nazi ideals and purposes. The Deutsche Arbeitsfront was created in 1933 to take care of the recreation of all workers. It is the German counterpart of the Italian Dopolavoro.

Spain.—An unusual form of adult education was begun in Spain by virtue of a decree of May 29, 1931. The Ministry of Public Instruction and Fine Arts undertook a threefold program of popular instruction especially for rural areas through traveling pedagogical missions made up of trained men and women who go from community to community trying to carry even to the most remote sections of Spain some of the advantages enjoyed in the urban centers. The general culture phase of the program consists of the establishment of libraries, organization of public lectures, conferences, motion pictures, musical performances, and displays of great works of art. On the pedagogical side are visits to rural and urban schools followed by weeks or fortnights of conferences and short courses for teachers in the neighborhood; practical lessons given in the schools; excursions with teachers and children; examination of the natural and social environment, and its possible application in educating the children. The third phase is citizenship instruction given through public meetings in which the principles of democracy are explained, the structure of the government is outlined, and the citizens' rights and duties are taught.

⁷ International Handbook of Adult Education. London, World Association for Adult Education, 1929.

CARE OF PRESCHOOL CHILDREN

If education extended upward and outward to include millions of adults, it likewise moved downward with respect to age groupings to care for larger numbers of children under the primary school admission time. A better realization of how important the first half dozen years are in the development of a human being made it clear that a nation's responsibility for its children cannot logically be postponed arbitrarily until the sixth or seventh year of their lives. Times of war and financial difficulty forced public authorities to undertake temporary schemes of providing for preschool children and that widening naturally led over into permanent undertakings. A review of progress in the nursery school and kindergarten fields is not necessary here. *The Report of the Consultative Committee on Infant and Nursery Schools*, published by His Majesty's Stationery Office, London, in 1933, contains the results of a study made under the direction of the Board of Education of England and Wales. The findings are typical of attitudes in most European countries. *Nursery School and Parent Education in Soviet Russia*, by Vera Fediaevsky and Patty Smith Hill, tells the story for the Soviet Union. *Young Children in European Countries*, by Mary Dabney Davis, is a survey of the situation in seven nations of Europe.

PHYSICAL EDUCATION

Physical education also was changed and strengthened by the war and the economic depression. Usually wars are followed by keen interest in physical training in part because the test of military service shows a high percent of physical disability and to some extent because the loss of life impels a desire to maintain the human wealth remaining at a higher level of efficiency. The impetus given to physical education by the war carried on through the decade under consideration and interest in it seems still to be mounting. Leaders of nationalist movements understand well the value of mass athletics, games, and sports in holding large groups of people together and teaching them to work for a common aim.

After the establishment of a national school system in Albania, (see page 5) physical education was much stressed. Austria has a national system of physical education with physical training compulsory in elementary and secondary schools. There is also a national recreation program promoted by the Österreichische Sport- und Turn-front. Play fields, ski courses, sport days, vacation houses, courses in alpinism and swimming, and exchanges of groups of students with other countries are continually emphasized.

The Belgian authorities began enforcing physical training in the schools about 1921. The Swedish system is used. In 1934 a higher

council of physical education and sports was created to study the subject from its medical, pedagogical, and sport aspects, and to advise on programs of instruction, teacher training, and inspection and control of physical education.

A Bulgarian law of 1932 made physical education compulsory in primary and secondary schools and in 1935 the entire question of physical training was being studied. Bulgaria has no national scheme of recreation but the "Yunaks" (heroes), an old organization much like the sokols of Czechoslovakia, continues to function and will probably be extremely active in case of any serious threat to the country's independence.

Physical culture plays an important part in the lives of the Czechoslovakians both within and without the school system. The ministries of education and national culture, public health, and physical culture, national defense, foreign affairs, commerce, and public works all give considerable attention and support to it. No official school program carries less than 2 hours a week of physical training and the bodily development of the child is watched over from the time he enters kindergarten. The sokol (falcon) movement founded by Miroslav Tyrš in 1862 is strong and sets the example for several similar organizations. In Yugoslavia also, Dr. Tyrš' system of physical training is used in the schools, and no fewer than 2,525 sokol units, apart from the schools, with 417,725 members were existing in 1934.

The establishment of the Royal Hungarian College of Physical Education at Budapest in 1925 to train men and women teachers of physical culture is but one event in the regular development of physical education in which the Hungarians as a people have long been interested. An efficient national system of physical training was set up by Law LIII of December 31, 1921, to be within the control of the ministry of cults and education and the ministry for home affairs, mainly the former, for in its budget a specific item "physical education" was then placed and has been continued. A national stadium was built, and a national board of physical education was created to advise the ministry on plans of studies and the kinds of grounds, equipment, and buildings necessary. All young men not otherwise participating in some form of systematic physical education must attend gymnastics classes until the end of December of the year in which they complete the twenty-first year of their age. Much of this sort of instruction is carried on by the "Levente" (junior men-at-arms) associations which in many respects resemble the yunaks and sokols.

*Turosienski, Severin K. Education in Czechoslovakia. Washington, U. S. Department of the Interior, Office of Education, Bulletin 1935, No. 11.

Germany.—During the era of the republic sport and physical recreation of all kinds developed broadly and rapidly in Germany. One of the best known indications of this interest was the hiking or "Wandervogel-Bewegung" and many societies were formed to further it. It gained a considerable foothold in other countries. Also there was a large growth in the number of sport clubs and similar associations as well as an increase of enrollment in those already existing. The German governments, Federal, State, and local, did much to encourage the movement. Large amounts of money were raised to build stadiums, swimming pools, athletic fields, and schools for training physical instructors. An administrative system was set up not to direct and control athletic and recreational activities but to promote them and to provide facilities for them.

The National Socialist government emphasizes physical attainments because it believes that through a physically fit nation economic security will be maintained and the country will be strengthened as a political and military power. It is centralizing control of all physical education and recreation activities in the hands of the Reich authorities who are changing the nature of physical training and the idea motivating it. Physical culture is no longer a matter of fun and enjoyment; it is a patriotic duty to improve the individual and through him, the nation.

The creation of the Reichsministerium für Wissenschaft, Erziehung und Volksbildung (see page 4) gave the central government full authority over physical education in the elementary, secondary, and continuation schools just as it did over other school work. Formerly physical instruction in the elementary schools was a sort of side issue given by teachers of other subjects who had taken and passed a special examination in physical instruction. Courses in preparation for the examination were given at the German College for Physical Culture (Deutsche Hochschule für Leibesübungen) at Berlin-Charlottenburg and the Prussian College for Physical Culture (Preussische Hochschule für Leibesübungen) at Berlin-Spandau and other institutions. The two colleges named were closed and a decree was issued requiring teachers to attend the newly created colleges for teacher training (Hochschulen für Lehrerbildung) where courses in physical instruction are to be given all students as part of the regular curriculum.

Physical training in the secondary schools has been raised in importance. The Reichsminister für Wissenschaft stated in an executive order of March 1936 that a high record in physical education subjects may make good a deficiency in one of the other subjects. The tests of students' physical prowess given just before graduation are emphasized and a failure in them may prevent graduation.

The institutes of physical culture in the German universities were first started in 1925 to be responsible for the physical development of all the students. They are regular departments headed by a professor usually with the rank of dean. By a special order of December 5, 1934, their scope was widened and the requirements for work in them made more strict. Every university student unless proved to be physically disabled must attend prescribed courses in them for 3 semesters amounting to about 100 clock-hours and pass tests of his ability as an athletic performer in the things taught in the courses. Students who expect to teach in secondary schools and wish also to qualify as secondary school physical instructors must in addition attend in an institute of physical culture a special course so extensive that it will require an additional year at the university and, having attended it, they must go to a special camp (Prüfungslager) where they are put through rigorous tests in the athletic work in which they were trained. Two such camps, one for women at Marburg, the other for men at Neustrelitz in Mecklenburg, have been established.

In Germany there are about 40,000 sport clubs that before the National Socialist Party came into power were loosely organized in several associations all of which were connected with the Reich Council for Physical Culture (Reichsausschuss für Leibesübungen) though each conducted its affairs free of any outside direction. To organize these associations and incorporate them in the Nazi movement, the Government early in 1933 created the office of Reich Sport Commissioner (Reichssportführer). The semipolitical clubs in which doctrines opposed to those of the party were taught, were dissolved and in 1935 an order was issued which in effect did away with the most important Catholic sport association. A new central organization, the Reich League for Physical Culture (Reichsbund für Leibesübungen) was established, the leadership principle was applied, and the various organizations even down to the individual clubs became subject to the direction of the central office. The Reich Sport Commissioner can control the activities of all sport clubs.

France.—The deputy charged with presenting to the Chamber of Deputies in France the budget for physical education in 1937 outlines in his report⁹ the history of physical training and expresses the reasons why the French people should support it liberally somewhat as follows:

Physical exercises tend to develop all the qualities of man. Here are the reasons why the entire nation is interested in their wide extension:

⁹ Barthélemy, M. Georges. Rapport fait au nom de la Commission des Finances chargée d'examiner le Project de Loi portant fixation du Budget Général de l'Exercice 1937. (Education physique—sports et Loisirs.) Paris, Imprimerie de la Chambre des Députés, 1936.

Strong individuals make up strong families.

Sport for all, by safeguarding the health of the young, makes for better economies in relief.

Whether rightly or wrongly, a nation's prestige lies to some extent in the successes of its champions.

Finally and especially, our military situation requires it. Our population is decreasing; that of Germany is increasing. At present—and what will it be in the future?—we are forty millions of French against sixty millions of Germans. That is something to think about. But one must take into account another factor. The German youth, better trained, is stronger than the French youth. It has been said, written, and repeated. We proclaim it again and utter a cry of alarm.

Previous to 1930 the central administration of physical education was in two branches of the Government: The Ministry of War which had its appropriation to care for the physical training of men before and after regimentation, and physical training in the army; and the Ministry of National Education which used its appropriation to look after physical education in the schools. These were united in 1930 in an Under-secretariat of Physical Education with a budget of its own. The Under-secretariat has two divisions: Military and civil. In 1931 a technical service (service technique) was added to study and report to the ministry on projects for creating stadiums, swimming pools, and fields for sports and gymnastics. Two advisory bodies function, the higher council of physical education (Conseil supérieur de l'Education physique) with 150 members and a higher committee of physical education (Comité supérieur de l'Education physique).

The central office of the Under-secretariat has a staff of 31; the regional and local offices are manned by a total of 841 military and civil employees, not including the Higher School of Physical Education at Joinville (Ecole supérieure d'Education physique de Joinville).

The school (meaning education in general) is not at all interested in physical education. That is a verity that it is banal to state, but it is a verity that should be proclaimed without ceasing.

In 1850 gymnastics was introduced as an elective in the programs. In 1854 it became obligatory in the lycées. Now, by arrêté of January 19, 1925, it is obligatory in all the schools and is given two hours a week to girls as well as to boys. Also some open-air games are provided for Thursday.

So comments M. Barthélemy,¹⁰ and he points out that lack of appropriations, abuses in school sports, unsuitable and even harmful surroundings in which physical education classes are conducted, lack of well-trained teachers and of institutions in which to train them, all militate against good physical education in France. The Higher School at Joinville, founded in 1852, and for many years engaged

¹⁰ See note on page 22.

in training military men, has gradually extended to include all physical education. Until 1933 it was in reality the only national French school of physical education, though at the universities there were 12 institutes and 3 centers which prepared candidates for the certificate to teach physical education in secondary schools. The Normal School of Physical Education (*Ecole normale d'Éducation physique*) was founded in October 1933 with a 2-year curriculum to train teachers for secondary schools and in part as an answer to foreign adverse criticism that physical education in France is only disguised military preparation. The Normal School takes over most of the work of the Institute of Physical Education of the University of Paris.

Sports and their relation to the proper use of leisure are also being given consideration in France, but with less emphasis than in many other countries. An under-secretariat of sports and leisure (*Sous-Secrétariat des Sports et Loisirs*) was created on August 13, 1936. It has but a small staff and little money.

M. Barthélemy proposes to change the situation by achieving a better administrative organization, securing more national funds to aid physical education, and arousing the French people to an understanding of the important part physical training has in any education scheme.

TECHNICAL AND VOCATIONAL EDUCATION

Technical education, as clearly noted (see pages 6 and 7), has been coming more and more within the control of the national ministries of education—except in the Union of Soviet Socialist Republics—and is being more closely coordinated with general education. The increasing interest in vocational and technical training stimulated vocational guidance or “professional orientation” as it is more commonly termed in Europe. Both fall within the concepts of the unity school system. (See page 7). Technical training has been forced into the foreground and is being considered more in relation to its place in the entire education program because of the spirit of nationalism with its corollary of economic self-sufficiency. Acting in that spirit, governments had to survey the natural resources of their countries and determine as nearly as possible the quotas of persons to be trained for and used in the many different activities necessary to national welfare. In the years of the depression, a “plethora of intellectuals” was a common complaint in a number of countries. Economic forces and governmental action worked as correctives of that situation by limiting the number of those who could undertake training for the learned professions, and by providing better facilities and stronger programs for preparation for technical pursuits.

France.—The basis of technical education in France is vocational guidance (orientation professionnelle). Its purposes and organization are expressed officially as follows:¹¹

A child comes from the primary school at 12 or 13 years of age. It is indispensable then, if not earlier, to give him and to give his family some information as precise as possible on the different careers that are open to him, on the chances that he may have to succeed in one of them, and especially on the counter-indications that it may present by reason of his physical, intellectual, and moral aptitudes, and by reason of the condition of the labor market.

The advice is given free by special organizations called offices of professional orientation, created in a certain number of cities by application of decree of September 26, 1922.

The offices are organized with the collaboration of:

1. Primary teachers who furnish the data on the intellectual and moral aptitudes of the children.
2. Physicians who verify the physical aptitudes.
3. The placement office which furnishes data on the condition of the regional labor market in such a way as to avoid if possible popular, overcrowded crafts, and direct the adolescents toward vocational certainties of a permanent interest, and offering good chances for the future also.

We add also that a special institute of study and research relative to professional orientation was created in Paris in 1928.

Eighty-nine such offices were reported as being in operation in 1934. They interviewed more than 38,460 primary school leavers and placed more than 13,230 in some form of employment.

The strong impetus to French technical education, as well as its organization, came from the Astier law of July 25, 1919. It is arranged on three levels or stages: First, to train qualified workers; second, for staffs of lower officials such as overseers of shops; and, third, for staffs of higher officials. Public technical education is administered mainly by the Under-Secretariat of Technical Education in the Ministry of National Education. Other ministries have charge of some of the very special types.

Some of the classes of schools and courses and their growth during the period under review are as follows:

TABLE 1.—TECHNICAL SCHOOLS AND COURSES IN FRANCE

Kind of school or course	Number of schools or courses		Enrollment
	1924	1935	1935
1	2	3	4
National schools of arts and crafts.....	6	6	1,260
National schools of clock-making.....	2	2	382
National schools of textile arts and industries.....	1	1	427
National school of ceramics.....	1	1	20
National professional schools.....	6	20	7,997
Practical schools.....	117	202	80,857
Subventioned technical courses.....	250	1,875	162,286

¹1934.

¹¹Atlas de l'Enseignement en France, 1933.

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The subventioned technical courses are given at centers arranged in the different Departments of France and are mainly vocational courses to fit young people for work in the industries peculiar to the locality. Courses in applied arts, rural artisanry, and home economics are included.

Growth has been rapid. In 1925 the Parliament voted in the budget a quinquennial extension of funds for technical education and at the same time created a special tax, the apprenticeship tax, which would compel industrialists and merchants—the persons who would use the trainees of technical schools—to pay part of the costs of the training. From 50 million francs in 1924, the budget of the Under-Secretariat of Technical Education rose to 79 millions in 1925; 94 in 1926; and by subsequent increases to 215 in 1933. The enrollment of approximately 250,000 in the schools in 1934 was more than three times that of the number of young people taking technical training in France before the war.

Estimates are that in France 800,000 young men and women under 18 years of age should normally be taking technical education. The government cannot provide for so many in public schools, so it has worked out what seems to be unusually successful methods of cooperating with private initiative. The apprenticeship tax previously mentioned may be in part or in whole withdrawn for those industrialists and merchants who help to maintain private technical schools. The Under-Secretariat may enter into agreement with any association or chamber of commerce to help create and maintain a school. In such a case, the presidency of the advisory council of the school may be held only by a craftsman and the association or chamber has the right to name half the members of the council. Figures are not available for the amount of technical education offered thus by private effort, but it is very large.

Belgium.—Technical education in Belgium was changed and completely reorganized in 1933 into a coherent and homogeneous system. Thirty-three ministerial and royal arrêtés were issued regarding it. Schools were classified and the requirements they must meet in order to be accredited and aided from national funds were fixed. Regulations were arranged for their administration, inspection, and the appointment of personnel. An important royal arrêté created the degree and the diploma of engineer technician and fixed the conditions for obtaining them, as well as the status of the schools that could grant them.

Estonia.—A special section for vocational education was created in the Ministry of Public Instruction of Estonia on May 1, 1934.

Working through it, measures were taken to improve vocational instruction and to provide more opportunities for it. Six new commercial schools and four shops were opened and new subjects were offered in schools already established.

Bulgaria.—Bulgaria reported an overproduction of intellectuals and the new government of 1934 closed the 41 incomplete gymnasias and 28 gymnasias in small cities and replaced them with 54 secondary real schools which offer a 3-year curriculum to which graduates of the 7-year primary school are admitted. The programs in these schools will be varied according to the locality. They are intended to be more practical than the gymnasias and will give access to the higher vocational schools of Bulgaria.

Irish Free State.—The story of the development of technical education in the Irish Free State as given in the successive reports of the Department of Education for the years 1925-26 to 1934-35, inclusive, is of such interest and indicates such careful planning and sound progress that it will be reviewed here in some detail.

Technical education passed into the control of the Department of Education in June 1924. Previously it had functioned under the provisions of the Agriculture and Technical Instruction Act of 1899 and was without the administration of general education. On assuming charge of it, the department's first care was to make a survey of this branch of instruction. That preliminary investigation led to the appointment of a commission "to inquire into and advise upon the system of technical education in Saorstad Eireann in relation to the requirements of trade and industry." That commission, consisting of representatives of employers, workers, teachers, and of the Departments of Education, Industry and Commerce, Agriculture, and Finance, an expert in technical education from Switzerland and another from Sweden, began its work in October 1926. It presented to the Dail its finished report early in 1928. Recommendations were made on the kind of continued education to be given young people who had left the primary school and had not obtained employment, on the technical education required by apprentices, on higher technical training for those seeking the more important posts in trade and industry, and on the control and finance of schemes of technical instruction. The report also contained accounts of the education systems of Sweden and Switzerland and information about the South Africa Apprenticeship Act of 1922. From the report came the Vocational Education Act of 1930 to replace the old Act of 1899.

Prior to 1930, instruction was offered mainly in (a) technical schools and (b) county schemes of technical instruction. That the

demand for technical education was constantly growing is evidenced by the following tables:

TABLE 2.—ATTENDANCE AT TECHNICAL SCHOOLS FROM 1924-25 TO 1929-30

Kind of course	1924-25	1927-28	1928-29	1929-30
1	2	3	4	5
Introductory	1,757	1,623	2,497	2,088
Commerce and languages	8,811	9,468	11,007	11,994
Science (pure and applied)	3,757	5,178	6,176	6,500
Handicraft	1,009	1,661	1,717	2,732
Domestic science	5,354	6,980	8,050	8,441
Art	916	967	1,150	1,279
Other subjects	204	129	155	180
Total	21,808	26,036	30,783	32,914

TABLE 3.—ATTENDANCE AT COUNTY SCHEMES OF TECHNICAL INSTRUCTION FROM 1924-25 TO 1929-30

Kind of course	1924-25	1927-28	1928-29	1929-30
1	2	3	4	5
Manual instruction	2,460	4,810	5,465	4,714
Home spinning, lace making, etc.	968	933	1,227	967
Domestic economy	4,631	7,171	8,070	46,712
Engineering			858	858
Commerce	884	1,063	1,394	906
Other subjects	1,352	714	692	1,276
Total	10,295	14,721	17,712	15,313

"The decrease in 1929-30," says the department, "is not to be taken as indicative of a lessening interest in the classes conducted in rural areas, for which the enrollment per center is as high as in the preceding session. The County Committees have in many cases been compelled to restrict the number of rural centers of instruction as a result of the rapid development of their permanent technical school centers and the consequent demands on the services of a limited teaching staff."

In 5 years the attendance at technical schools and county schemes had increased by 50 percent. 1930-31 was a year of transition. Under the Act of 1930, the former technical instruction committees gave way to the vocational education committees each with fewer members, but with greater powers and duties. The new committees were busy arranging procedures to fit the new law, exploring its possibilities, planning development especially of buildings, and arranging their budgets for submission to the Department by December instead of the following May or June as had been the practice. A complex system of grants from national funds had grown up in the 30 years in which the old law was effective. A simpler system of a single block grant for each committee was established, the amount of the

grant to depend on the total due under the old system plus a development grant that would be computed partly on the population of the area and partly on the amount it would contribute above a required minimum. Many of the committees started to provide better accommodation and laid their building plans before the Department.

The first full year under the Vocation Education Act was in 1931-32. The main change was in continuation education for children who had left the primary school and were seeking employment. Whole-time day courses were introduced by every committee and between 7,000 and 8,000 students attended. In rural areas the demand for courses of this type was so great that it was difficult to accommodate all who came. Part-time continuation schools did not prove popular. In 1932-33, the attendance at continuation schools was 11,536 of whom 9,173 were in whole-time courses.

Of the general situation of technical education in 1934-35, the Department reports:

Continuation and technical education continued to develop steadily during the session 1934-35. In several centers new schools were opened and extensions to existing schools were completed. Teaching staffs were increased to meet the growing demand for instruction. Additional equipment was acquired. Despite the rapid erection of new schools, vocational education committees were confronted with requests for more schools in areas yet untouched. There has now developed a realization of the value which a sound system of technical and continuation education confers alike upon those seeking employment and those already in occupations. It is noted that the demand from rural areas is increasing.

The total attendance in 1934-35 at the different forms of vocational and technical education was 62,670.

SECTION II. ASIA

In the previous section dealing with education in Europe, certain of the larger trends and movements were selected and discussed, and education within a country was mentioned as it afforded an example of one or more of the phases under consideration. That manner of presentation is not easily applicable to Asia as a continent. The greater part of the population of Asia is in China and India, only two countries, and in many respects, as far as education is concerned, they seem to be going in opposite directions. It appears advisable in this and most of the subsequent sections to discuss countries as entities and point out what each has been doing in the past 10 years. The reader will note many changes analagous to those most prominent in Europe, and many others peculiar to a country because of its special physical or historical characteristics. China, India, Iran, and Turkey are selected as including most of the important education events in Asia.

CHINA

The 18 provinces of China proper have an area of 1,532,815 square miles and a population estimated at 370.7 millions. The area is about three-fourths that of Europe, west of Russia, and the population is approximately equal to that of western Europe. Here, then, is a single education project which equals in magnitude the total of the 30 European systems.

The first marked change toward a modern school system in China came in 1902. The advent of the Republic in 1912 brought fundamental alterations in the system. It was again revised in 1922. The National People's Party (Kuomintang) took over the government in 1927 and in 1928 promulgated the "Law Governing the Organization of the National Government of the Republic of China." In 1927 the highest education authority of the national government was vested in the National University Council. A year later the name of the council was changed to Ministry of Education, and it became a part of the Executive Yuan, one of the five major divisions of the government.

Administration.—Concerning the changes in education policy that were brought about in 1929 and later by the national government, the minister of Education wrote in 1935:¹

The development of modern education in China since 1912 has been continuous but not even in all directions. . . . In fact, it was a period of intense activity but divergent development: the university, secondary school, and primary school each growing more or less in its own way.

This period of continuous but divergent development could be appropriately characterized by what, for want of a better term, may be called spontaneous growth. The guiding spirit in education was *laissez-faire*, not only evident in education, but also in much that was happening in the social and intellectual life of the country. The spirit of *laissez-faire* was most obvious in the absence of a coordinated educational policy of the Government with respect to the relative development between the university, secondary school, and primary school.

To all intents and purposes, the Government's educational policy since 1929 has been inspired by a different outlook and a different spirit, and many changes have been introduced in the education system of the country. These changes have one thing in common: they are guided by an attitude which refused to believe in the efficacy and sufficiency of the *laissez-faire* principle. If there is one crucial test to distinguish the two periods divided roughly around 1929, it is the renunciation of *laissez-faire* and the introduction of coordination as a policy in education. This coordination not only finds application in adjusting the component parts of the educational system for more harmonious development, but may also serve as a basis to judge the measures adopted in recent years to meet the problems of each of the parts.

This is the expression of a policy of centralizing the control of education in the national government. That policy does not include forcing the political beliefs of the party on the Chinese people. It is rather a plan for forming an adequate and well-balanced education system. The first steps were taken early in 1928 and were mainly in the direction of ridding the schools of communistic and political activities. The Fourth Plenary Conference of the Central Executive Committee of the Kuomintang held February 2 to 7, 1938, declared that:

China's greatest cause for suffering is that immature students participate in affairs of political and social struggle. . . . How can these great national and social tasks be left to these immature people with freedom of action? This is not only a tremendous sacrifice of the precious future life of the nation, but is also making the life of the entire nation or society an article for child's play. . . .

¹ Shih-Cheh, Wang. *Education in China*. Shanghai, China United Press, 1935. 45 p.

The way of salvation is to safeguard educational independence, enrich educational contents, guard against the corruption and depravation of our young, universalize popular education, and enhance the people's knowledge.

Higher education.—Higher education is given in three classes of institutions: Universities, independent colleges, and technical schools. The two former are governed by the law on university organization of July 26, 1929; an amendment of 1934; and the regulations of university administration of August 14, 1929. The technical schools operate under law of July 26, 1929, and the revised regulations of March 26, 1931. These laws and regulations aim to insure in each university a balance of offerings so that both classical knowledge and science and its applications may be had; to afford sound financial bases by fixing definite legal minima for initial expenses when an institution is established, and for its current yearly expenses; to regulate the internal administration of the institution; and to provide common standards of matriculation and graduation. The curricula are mainly in the hands of the institutions, but they also may come under the purview of the Ministry of Education.

Secondary education.—Secondary education was brought under three separate laws passed in 1932 and three sets of regulations issued by the Ministry of Education in 1933. Secondary schools are of three classes: Middle, normal, and vocational. Formerly the three types could function in one school; now they must be kept separate. The middle school is to prepare students for universities. It is a 6-year institution divided into the junior middle school of 3 years and the senior of 3. In the period from 1922 to 1929, middle schools freely offered elective courses and there was no standard of reasonable distribution of the different subjects in the curriculum. The law of 1932 and the later regulations prescribed the subjects to be taught, fixed the number of hours a week for each, set a total of 34 to 35 week-hours, abolished electives, and discontinued the credit system. The standard for teaching each subject was issued by the Ministry of Education and completed in 1934. The regulations of the schools with respect to internal management, fees, admission, instruction, graduation, qualifications of teachers, and similar matters are comprehensive and precise.

The secondary normal schools admit graduates of junior middle schools and with a 3-year course train them to be teachers of primary schools. They also are strictly patterned by the law of 1932 and the regulations of the Ministry.

The vocational schools are either junior or senior and may be established separately or together. Both are 3-year institutions. They also are closely regulated and by late 1933 the Ministry had issued detailed curricula for the different trade groups of studies.

In the middle and normal schools the law provides that at least 20 percent of the annual budget shall be used for capital outlay purposes, not more than 70 percent for salaries, and not more than 10 percent for administration.

Elementary education.—Elementary education also came under the direction of the Ministry by a 1932 law on primary schools and for the junior schools and 2 for the senior. The schools are mainly the regulations of 1933. It is a 6-year process divided into 4 years supported by district, city, or village authorities. The curriculum is fixed by law and it is in the development of the curriculum that much progress has been made. The most important change was from the use of classical Chinese as the medium of instruction to the vernacular. The educational and social value of this move is so great that its implications cannot be grasped. Probably the Chinese could never have attained anything approaching elementary education for all their children without taking this step.

The law of July 1934 fixes the qualifications, the examinations, and the certificates for teachers of primary schools.

Statistics.—Statistics of education in China vary considerably. A summary of one apparently authentic report is as follows:²

TABLE 4.—EDUCATION IN CHINA

Kind of school	Number of schools	Number of students	Teaching staff
1	2	3	4
Public:			
Kindergartens.....	760	32,888	1,468
Primary.....	212,728	9,892,310	437,101
Higher primary.....	821	200,978	13,762
Secondary.....	204	25,514	8,557
Complementary.....	40,354	1,284,756	72,910
Vocational.....	209	26,498	4,677
Normal.....	861	93,697	10,702
Universities.....	37	18,925	6,209
Other higher institutions.....	20	1,922	828
Private:			
Kindergartens.....	327	14,539	749
Primary.....	44,997	2,381,390	116,284
Higher primary.....	565	148,615	9,620
Secondary.....	330	40,811	11,547
Complementary.....	5,597	212,230	15,569
Vocational.....	103	16,034	2,080
Normal.....	32	7,143	693
Universities.....	42	20,441	3,905
Other higher institutions.....	9	1,648	372

Most of these schools are coeducational; a few are for girls only. Of the total number of students, at least 14 percent are girls and women.

² Bureau International d'Éducation. *Annuaire International de l'Éducation et de l'Enseignement, 1936.* Genève, Bureau International d'Éducation, 1936.

Compulsory education.—The primary school enrollment of around 12½ millions is small in a nation that must have at least 70 millions of children between the ages of 6 and 14. The Chinese Government early adopted the principle of universal compulsory education but the magnitude of the undertaking, the buildings and equipment to be provided, the books to be supplied, the army of teachers to be trained, and the funds to be raised, have prevented carrying out the principle in any short time. Various plans have been offered and undertaken to meet the situation. The scheme of 1920 provided that complete enforcement of compulsory education should be attained in 8 years by applying it in 1921 to provincial capitals and open ports; 1922, country seats and cities; 1923, towns with more than 500 families; 1924, towns with more than 300 families; 1925 and 1926, towns with more than 200 families; 1927, villages with more than 100 families; and 1928, villages with fewer than 100 families. Because of political troubles that program was never seriously put into effect.

The National Educational Conference in 1930 outlined a plan that would, it hoped, enforce compulsory education throughout China in 20 years. The Ministry of Education in 1932 formulated a scheme to increase the number of children in primary schools by 10 percent in the time from August 1932 to July 1935 and follow that by a similar drive. It tried to arrange also for 1 year of instruction for children between 10 and 16 who had missed the primary school.

The latest proposal made in 1935 is that the duration of obligatory instruction will be 1 year for the 5 years beginning 1935; 2 years beginning 1940; and 4 years from 1945. For 1935-36, the National Government offered aid to the amount of \$2,400,000 to carry it out and the Boxer indemnity funds contributed \$300,000.

Reduction of illiteracy and adult education.—The League of Nations' Mission of Educational Experts reported:¹

Adult education is one of the most satisfactory features of education in China. There are two special aspects of adult education in China which differentiate it at first sight from the work of corresponding organizations in Europe and America. In the first place, it bulks much larger in the educational system as a whole, and its budget is proportionally far bigger than in other countries. In the second place, it stands in China for something very different, both in its character and its essential aims, from adult education in Europe and America. . . . In a country where the percentage of illiterates is somewhere about eighty, the teaching of reading and writing is bound to be the main object of adult education, not merely in order to put an end to illiteracy, but also to induce adults to have their children better educated, and to win them over to the cause of the extension of education. Adult education is also here, as a rule, the

¹ The League of Nations' Mission of Educational Experts. *The Reorganization of Education in China*. Paris, Institute of Intellectual Cooperation, 1932. 200 pp.

principal form of social education. . . . Educational activities for adults fall under three main heads, viz:

1. The education of adults who have had no opportunity of acquiring the rudiments; this includes the campaign against illiteracy, popular schools, social centers for the education of the masses, etc.
2. Subsidiary organizations for adult education and advanced study (libraries, museums, etc.).
3. Social education in general, viz, æsthetic education, improvement of social manners and popular pastimes, popular physical education, general culture, etc.

All these activities are directed by a department of the Ministry of Education.

The mass education movement.—Most famous of all the adult education efforts in China and indeed among the most famous in any country, is the mass education movement launched in 1920 by Y. C. James Yen. In its earlier years it involved selecting about 1,000 of the most commonly used characters from the "pai hua," the language commonly spoken by the mass of the Chinese, preparing texts from them, and working out a system of teaching by which literacy in them could be attained by an average illiterate working only 1 hour a day for 4 months.

The plan has proved practical and workable. Good progress was made in the large cities and in 1929 the point of emphasis was shifted from extensive promotion of literacy to intensive study of rural life and needs, and the Ting Hsien experiment was established to work on three types of education—school, home, and social—and a four-fold plan of reconstruction in culture, economics, health, and socio-politics. An account of the experiment is available in English.*

Status of private education.—Table 4 on page 33 shows that private education has a large part in the total of the education efforts in China. Moreover, much of the private education has been offered by foreigners, mainly missionary organizations from occidental countries. The Chinese people have by no means been unaffected by the spirit of nationalism manifest in the world in the past two decades, and several attempts have been made to work out a status for private institutions in China that would be satisfactory to both the Chinese government and the institutions. Regulations of November 1925, October 1926, August 1929, and October 1933, all look toward making foreign educational enterprises in China subject to the same requirements as Chinese schools proper. All private schools are required to register with the public authorities and their organization, curricula, and all other matters shall be carried out in accord with current education laws and orders. No foreigners may establish primary schools

* Chinese National Association of the Mass Education Movement. *The Ting Hsien Experiment in 1934*. Peiping, 1934. 46 pp.

for the education of Chinese children and no religious ceremonies may be held in primary schools. The head of an institution of middle school grade or higher must be a Chinese citizen and in such institutions not more than one-third of the members of the board of directors may be foreigners. Religious subjects may not be compulsory in secondary schools or universities, and religious propaganda as a part of the lessons is not permitted. In effect, the national government intends to have direct control of the private educational projects to the ends that they give good instruction and do not interfere with the development of Chinese national life.

INDIA*

Education in India has been keenly responsive to political and economic conditions. A word picture of the years following the Government of India Act of 1919 is:⁴

Indeed, in some respects, the years between 1922 and 1930 form a period which may well be regarded as perhaps the most inspiring in the annals of Indian education.

A burst of enthusiasm swept children into school with unparalleled rapidity; an almost childlike faith in the value of education was implanted in the minds of the people; parents were prepared to make almost any sacrifice for the education of their children; the seed of tolerance towards the less fortunate in life was begotten; ambitious and comprehensive programmes of development were formulated, which were calculated to fulfill the dreams of a literate India; the Muslim community, long backward in education, pressed forward with eagerness to obliterate past deficiencies; enlightened women began to storm the citadel of old-time prejudice against the education of Indian girls; government, with the full concurrence of legislative councils, poured out large sums of money on education, which would have been regarded as beyond the realm of practical politics ten years previously.

In a broad way, the following table indicates the growth.

TABLE 5.—GROWTH OF EDUCATION IN INDIA IN NUMBER OF INSTITUTIONS, AND PUPILS, AND AMOUNT OF EXPENDITURES, 1921-22 TO 1933-34

Year	Institutions	Pupils	Expenditures (rupees)
1	2	3	4
1921-22			
1926-27	208, 118	8, 381, 350	183, 732, 069
1927-28	246, 264	11, 157, 496	245, 847, 572
1928-29	251, 724	11, 775, 222	258, 278, 819
1929-30	258, 018	12, 166, 104	270, 732, 253
1930-31	260, 946	12, 415, 126	274, 282, 018
1931-32	262, 068	12, 689, 086	283, 161, 446
1932-33	257, 792	12, 766, 537	271, 856, 622
1933-34	255, 348	12, 853, 532	257, 875, 868
	256, 725	13, 172, 890	261, 765, 186

* Anderson, Sir George. Progress of Education in India 1927-32. Tenth Quinquennial Review. Two volumes. Delhi, Manager of Publications, 1934.

Translated into terms of annual increases and decreases, these data show:

TABLE 6.—ANNUAL INCREASES AND DECREASES IN INSTITUTIONS, PUPILS, AND EXPENDITURES IN INDIA, 1921-22 TO 1933-34

Year	Institu- tions	Pupils	Expenditures (rupees)
1	2	3	4
1921-22 to 1926-27	7,029	555,220	12,418,920
1926-27 to 1927-28	8,490	617,726	12,431,247
1927-28 to 1928-29	3,294	390,882	12,437,433
1928-29 to 1929-30	2,928	349,022	3,549,795
1929-30 to 1930-31	1,122	173,960	8,879,428
1930-31 to 1931-32	74,276	77,471	21,904,824
1931-32 to 1932-33	72,441	80,995	23,980,754
1932-33 to 1933-34	1,377	319,378	3,889,318

1 Annual average for 5 years.

† Decrease

In the first year of this decennium the gains in institutions, pupils, and expenditures were greater than the annual average for the preceding quinquennium. Gains then decreased until the crisis years of 1931-32 and 1932-33 when institutions and expenditures lost all that had been won in the previous 3 years. It is significant that the number of pupils continued to increase even though slightly. In the following year, which showed betterment in the economic situation, moderate increases in institutions and expenditures were resumed, and a large addition was made to the number of pupils.

Decentralization of administration.—Though the Government of India had little control of education prior to 1921 when the political reforms went into effect, those reforms included a process of transfer of responsibility to provincial government and later to local bodies to such an extent that few other countries have so completely decentralized the administration of education. Chapter II of the Quinquennial Review to which reference was made previously (see page 36) is a survey of the way that policy has worked out in India, a classic in the many discussions of the relative merits and defects in such a plan. Among the advantages cited are: Development of initiative and the desire to experiment; closer contact with public opinion; removal of delays caused by the necessity of referring all important questions to a distant authority; freedom of each province to develop an education policy suited to its needs; training people in the management of their own local affairs; and active and intelligent interest in education shown by the provincial legislatures.

Among the defects that have come to light in this Indian experience are: A natural tendency of the province to isolate itself from its neighbors, to pass from the provincial to the parochial and to respond too readily to local impulses; loss of the advantages derived

from submission of education plans to an authority commanding a wider outlook; loss of aid from central revenues to meet the cost of developing compulsory primary education; wastefulness in some provinces of the money spent on primary education; serious overlapping between the provinces especially in the region of higher education; weak provincial administration and inspection service; and too frequent changes in provincial education ministers so that continuity of policy has been made very difficult.

Compulsory education.—The 13,172,890 students in schools in India in 1934 amounted to 4.85 percent of the population, and literacy among persons 5 years of age and over in 1931 was 9.5 percent. In that situation, compulsory education has made some progress. By 1930 the compulsion principle for boys had been introduced in Madras, Bombay, Bengal, United Provinces, Punjab, Bihar and Orissa, Central Provinces, Assam and Delhi—these are most of India—but was and is not applied to the entire areas. In 1932 a total of 153 urban areas and 3,392 rural sections were under compulsion. It has made more progress in the Punjab than in any other area. For economic and other reasons, authorities in India feel that it is not advisable to enter upon a drastic program of enforcing compulsory education:*

Spasmodic "drives" to bring in all and sundry of varying ages and competence cannot be productive of any lasting benefit and militate against orderly organization of good class teaching. The better plan would be to make a careful survey of the census statistics and to estimate for each area the number of pupils attaining the age of 6 years in each year who should be admitted to school by the agency of compulsion. By that means class organization would be simplified and, with regularity of attendance resulting from compulsion, pupils should complete the primary course in the normal period of time. "Straining after the last truant" is both vexatious and extravagant. It is far more important to exact penalties from parents of children who are irregular in attendance and who leave school before completing the course than in respect to boys who have no desire to attend school.

There is, therefore, no cause for undue pessimism, provided that earnest efforts are being made to prepare the way for compulsion. As efficiency of teaching is improved, so will the prospects of compulsion become brighter. The essential preliminary is the establishment of a series of five-class schools, staffed by well-trained products of vernacular middle schools. A well-devised distribution of schools is also essential; compulsion cannot be based on ephemeral schools without continuity or tradition. A village school under compulsion should become a village institution.

Education of girls and women.—Of the 12,766,537 students on the rolls in 1932 of all classes of institutions, 2,492,649 or 19½ percent

* Anderson, Sir George. Progress of Education in Indian 1927-32. Tenth Quinquennial Review. Two volumes. Delhi, Manager of Publications, 1934.

were women and girls. That ratio of one to four expresses broadly the attitude in India toward education of women. Moreover, an overwhelming part of this enrollment is in the first three classes of the primary schools, and the loss each year is startling. The number of girls by classes from 1927 to 1932 was:

Class	Year	Enrollment	Remarks
I.....	1927-28	1, 215, 822	
II.....	1928-29	311, 281	(nearly three-fourths had dropped out).
III.....	1929-30	197, 321	(more than five-sixths had gone).
IV.....	1930-31	120, 464	(about 1 in 10 remained).
V.....	1931-32	69, 945	

About 1 in 17 of those who entered class I had reached and were studying in class V. Of course, classes IV and V are necessary if there is to be any assurance that the girls will acquire a minor kind of literacy and retain it. Note the number of girls in classes IV and V by provinces in 1932, and the relationship of that number to the female population.

TABLE 7.—NUMBER OF GIRLS IN CLASSES IV AND V, AND FEMALE POPULATION

Province	Female population (millions)	Girls in classes IV and V
Madras.....	23.6	69, 770
Bombay.....	10.3	44, 782
Bengal.....	24.0	15, 779
United Provinces.....	28.9	12, 092
Punjab.....	10.7	20, 840
Burma.....	7.1	14, 605
Bihar and Orissa.....	18.8	4, 175
Central Provinces.....	7.7	6, 583
Assam.....	4.0	8, 919
Northwest Frontier.....	1.1	1, 564
British India, including minor subdivisions.....	131.7	203, 728

This picture of fewer than 204 thousand girls in the third and fourth grades out of a total female population of more than 131 millions is far from being bright. Yet it represents a gain of nearly 50 percent in 5 years. Further increases of 20,097 were made in 1932-33, and 23,645 in 1933-34.

The underlying causes of the situation have been the social and religious attitudes toward the education of women. They expressed themselves in allowing comparatively scant appropriations for girls' schools, compelling girls to attend schools for boys and be taught by men teachers, making little provision for the training of women teachers, and opposition to that kind of coeducation in which both men and women are on the teaching staff.

The situation has improved much in the past decade. Many of the social and religious obstacles to women's education are crumbling; the percent of girl students who reach classes IV and V is increasing;

and the training schools for women teachers are constantly enrolling more students. High schools and middle schools for girls are growing in number and most of the Provincial authorities are optimistic over the development of collegiate education for women.

Other phases of education.—Adult education has for the most part failed in India, and vocational education has made relatively little progress.

• IRAN •

The founding of the Pahlivi dynasty, December 16, 1925, opened the way for the rapid advances in education. Since that date steps have been taken in quick succession to round out a complete effective school system for the 12 millions of people. For the most part educational movements in the past decade in Iran have followed the pattern of those connected with revolution in Europe. Iran has been passing through a revolution in the way of the adoption of many occidental ideals, customs, and modes of living and with that change has come the western concept of universal education. The Iranian situation is characterized by strong nationalization of education in the sense that the central government administers and mainly supports all public education, controls and aids private schools, has all types of education within its purview, and is building up a well-unified system of lay schools.

Statistically the progress is indicated in the following table:

TABLE 8.—GROWTH OF EDUCATION IN IRAN, 1924-25 TO 1934-35

Item	1924-25	1934-35
Schools of all kinds and levels	3,285	5,339
Number of students	108,959	255,673
Teaching staff	6,080	11,901
Pupils taking the examinations at primary schools	1,870	8,874
Pupils taking the examinations of the second cycle of secondary education	77	748
Students taking examinations on university levels	41	183
Education budget, in rials (\$0.0824 at par)	7,731,380	58,004,070

Multiplying the education budget by something more than seven and doubling the enrollment in the schools during years that were mainly within an economic crisis bespeaks an unusual earnestness and effort.

Schools of different kinds and levels.—Kindergartens numbered 22 in 1934-35. With the exception of one which is maintained by the Government to serve as a model, all are carried on by private organizations and kept open for the greater part of the day. Some continue their work during the summer vacation.

*The Persian Government requested that beginning with the Persian New Year, March 22, 1935, all other governments in addressing it use "Iran" and "Iranian" instead of "Persia" and "Persian." The Persians call their country "Iran" and refer to themselves as "Iranul." Iran is derived from the ancient "Aryans" meaning the country of the Aryans.

Primary instruction has been made obligatory for both boys and girls from 7 to 13 years of age. In the cities the curriculum is 6 years; in the rural districts, 4. Eighteen primary agricultural schools in various parts of the county follow the 4 years of general education by 2 years that are purely agricultural. Not until 1935-36 was there coeducation on primary levels. In that year some mixed schools were established in Teheran and in the provinces. Public primary schools in 1934-35 were 915 with an enrollment of 108,643, of which 23,379 were girls. At the same time 3,726 private primary schools had 120,162 pupils, including 34,292 girls. Pupils who have finished the sixth year of primary schooling and earned the certificate of completion of primary studies may stop school, enter a secondary school of general training, or take up work in a vocational school.

Secondary instruction is 6 years for boys, 5 for girls, and is similar to secondary training in France. A baccalaureate is granted the successful students and with it comes admission to study on university levels. Public secondary schools numbered 104 in 1934-35 and enrolled 10,020 pupils, of which 747 were girls. There were 547 private secondary schools with 12,200 enrolled, including 2,478 girls.

In furtherance of its plan to have a complete National system of education, the Iranian Government set apart 2 million rials in the budget of 1933-34 to purchase a site and begin buildings for a public university. The law establishing the university (Daneshgah) was approved by Parliament (Majlis) on June 29, 1934. On February 4, 1935, the Shah laid the foundation stone of the new institution. Construction has been going on continuously since. This new Teheran University has faculties of medicine, law and political economy, theology, sciences, arts, and engineering. Not all of these are new faculties. That of medicine, for instance, dates to 1854 and is the oldest of the groups which are now brought into a single organization connected with the Ministry of Public Instruction. In 1934-35 with a staff of 109, the University registered 1,198 students and graduated 158.

Almost coincident with the law establishing Teheran University was an enactment providing that within 5 years after March 21, 1934, the Government should found 25 lower normal schools at the rate of 5 each year, a higher normal school for girls, and complete the previously founded higher normal school for boys. At the close of 1934-35 there were 7 of these lower normal schools for training primary school teachers and early in the following year new lower normals were opened at Teheran, Tabriz, Mehed, Chiraz, and Reht.

Technical and vocational education are not being neglected, but the schools are mostly under ministries other than that of public instruction. Besides the faculty of engineering in the university,

are the higher schools of war, arts and crafts, agriculture, midwives, financial sciences, and veterinary science. On lower levels of instruction are schools of arts and crafts, commerce, dyeing, posts and telegraphs, agriculture, civil service, and financial sciences.

Reduction of illiteracy.—Early in 1936 an active campaign against illiteracy was launched by an order directing the Minister of Public Instruction to open in primary schools all over the country classes in reading, writing, and arithmetic for illiterate adults between 18 and 40 years of age. The instruction was made compulsory for illiterate policemen and subalterns in public offices. Later in the year reports showed that 752 night classes had been established.

Sending students abroad.—The idea of sending young Iranians abroad for training originated in 1911 when a law was passed providing that the Government would send 30 each year to Europe, half of them to take teacher-training courses and return to enter the teaching profession in Iran. Political disturbances in the World War broke up this scheme after the first group had been selected and sent. But the idea clung and was taken up again in 1928 when provision was made for 100 students to go abroad yearly to Europe and America, 35 of them to study education. In 6 years, 640 were granted these scholarships and 569 completed their studies. The number in education was 143. Thirty-one other vocations were represented in the group; medicine stood second highest with 96.

TURKEY

The revolution that has been taking place in Turkey in the past 17 years has been thorough and drastic. From a despotism presided over by an absolute hereditary monarch, the government changed to a republic with a national assembly and an elected president. The seat of government was moved from Istanbul, which had been the capital of one or another empire for 16 centuries, to Ankhara, an inland town. The civil government was separated from the church. The franchise was opened to all Turkish men and women at the age of 23 and women were declared eligible for election to public offices. Even the alphabet was discarded and a more suitable one adopted.

Education kept pace with the revolution. The law of uniform education of March 3, 1924, closed the theological seminaries (Madrasah), numbering some 490 and attended by 12,000 pupils, and paved the way for secularization of education and a modern school system. Private schools are under careful public supervision and have a place much less important than formerly in Turkish education affairs. The abolition of the Arabic alphabet by law of November 1, 1928, and the substitution of the Latin alphabet greatly simplified the

teaching of reading and writing and made it more nearly possible to bring the 16 millions of Turkish people to a state of literacy in a reasonable time. Illiteracy was estimated at 85 percent in 1931-32. With the change in alphabet a commission was set up by the Ministry of Education to simplify and purify the language, compile a dictionary for it, and settle its scientific and technical phraseology. From January 1, 1929, all Government departments and business houses were compelled to use the new alphabet and no other could be employed in any book or newspaper. Western figures and the metric system of weights and measures were adopted from June 1, 1929.

Obligatory instruction.—The basic law of the new educational organization dates from March 22, 1926. Under its terms the control of education is strongly centralized in the national government acting mainly through the Ministry of Public Instruction. The Minister holds the right of inspection even over the colleges and departments of the University. By Article 87 of the constitution, primary education was made obligatory for all Turks and free of tuition charges in the public schools. The obligation begins when the child is 7 years of age and lasts for 5 years. It has not been enforced throughout all the republic because of a lack of school buildings, an urgent problem to which the authorities have given much attention. The cost of a village school building is a direct charge against the villagers. Some of the richer vilayets (provinces into which Turkey is divided for purposes of administration) have been able to erect a school in every village. In poorer and more sparsely settled areas joint-schools are placed sometimes with boarding accommodations and in other cases with transportation to and from school. Acting on the advice of European specialists, the Ministry has a model building at Ankara and distributes to the vilayets plans of buildings suited to each area, particular attention being paid to the type of building material available in the locality.

The 5-year primary school program adopted is essentially of the activity type based on centers of interest, and some difficulty is met in carrying it through because of the extreme change from previous programs and the lack of trained teachers to undertake the more difficult form of teaching.

Teacher training.—To provide accommodations for the normal schools that must be established to train elementary school teachers, the Government voted considerable sums of money and required each vilayet to set aside 10 percent of its local budget each year for 5 years. By that means some excellent modern structures with good equipment were provided. By 1933-34 there were 10 primary normal schools for men and 7 for women. The program of studies, based