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ABSTRACT

Information presented in this report is based on responses from school and district administrators to a survey of existing teacher demand and shortages in elementary and secondary schools during the 1983-84 school year. The survey instrument consisted of three parts, each of which collected a different type of data: (1) "head counts" for the number of positions offered and teachers hired (new versus continuing, certified versus noncertified) for the 1983-84 school year; (2) indications of the use of merit pay and incentive programs by schools and districts employing teachers; and (3) "full-time equivalent" figures on teacher employment, certification, and shortages, by specific teaching assignment (instructional level and subject). Data are presented on tables in two different formats. Estimates relating to part one (head counts) and data from part two (indicators) are shown by type of employing agency and geographical region, while data from part three (full-time equivalent figures by teaching assignment) are shown as national estimates by level and subject. (JD)

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TEACHERS IN ELEMENTARY AND SECONDARY EDUCATION
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Historical report

OERI

Center for Education Statistics
U.S. Department of Education

Office of Educational Research and Improvement

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TEACHERS IN ELEMENTARY AND SECONDARY EDUCATION

Director's Note

The information presented in this report is based on responses from school and district administrators to a survey of conditions existing during the 1983-84 school year. Some of the findings may differ from those of other studies for the following reasons:

1. The questions on certification did not define criteria for certification but simply asked whether teachers were certified according to the laws of the States in which they were teaching. Since regulations differ from State to State, comparisons between States regarding the percentage of teachers certified are not recommended.
2. Shortages as defined in this report are actual shortages, rather than opinions about the availability of candidates for teaching positions; they are cases in which an appropriate teacher candidate for a planned and budgeted position was not found by the school district. In these cases, administrators responded to shortages either by deleting planned course offerings from the educational program or staffing them with temporary substitutes until an appropriate teacher could be found.
3. Since the survey was conducted during the 1983-84 school year, conditions may have changed to some extent. The teacher labor market, like any market, is not entirely predictable. As conditions change, reactions to those changes prompt additional changes. Therefore, this report should be interpreted as a "snapshot" of the market at a specific point in time. However, in a work force of some 2.7 million people, massive changes do not occur quickly. But, the survey will serve as a benchmark for identifying changes when CES completes new surveys now in the field test stage.

Although the report is not in itself a predictor of future supply and demand, the information it provides about the teacher labor market makes a significant addition to other descriptive information that has been available on teacher employment.

Emerson J. Elliott, Director
Center for Education Statistics

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The Survey of Teacher Demand and Shortage

In school year 1983-84 the Center for Education Statistics conducted a survey to determine the demand for, and availability of, qualified teachers in critical areas within education, in accordance with a Congressional mandate in the General Education Provisions Act (PL 93-380). In this Survey of Teacher Demand and Shortage, a nationally representative sample of employers of teachers in both public and private elementary and secondary education was asked a series of questions about teacher employment, including information on certification status and teacher shortages in their schools and school districts.

Survey forms were mailed to administrators in 2,540 of the approximately 15,300 local and intermediate public education agencies and to principals and headmasters of 1,000 of the approximately 27,000 private schools in the Nation. Usable responses were received from 2,263 public education agencies and 809 private schools. The responses were weighted, including appropriate adjustments for nonresponse, to provide estimates for each of the groupings specified in the tables. The tables include national estimates for private schools, public education agencies, and subject-matter categories and additional estimates by four geographic regions, size, and metropolitan status for local and intermediate public education agencies.

The survey instrument consisted of three parts, each of which collected a different type of data.

- o Part I requested "head counts" for the number of positions offered and teachers hired (new vs. continuing, certified vs. noncertified) for the 1983-84 school year.
- o Part II called for indications of the use of merit pay and incentive programs by schools and districts employing teachers.
- o Part III requested "full-time equivalent" (FTE) figures on teacher employment, certification, and shortages, by specific teaching assignment (instructional level and subject).

In this report, data are presented in two different formats. Estimates relating to part I (head counts) and data from part II (indicators) are shown by type of employing agency and geographical region, while data from part III (full-time equivalent figures by teaching assignment) are shown as national estimates by level and subject.

Employment and Certification of Teachers

Almost 2.7 million teachers were employed by public education agencies and private schools in the 1983-84 school year. Of this total, 2.3 million were teaching in public school districts, and about 400,000 were in private schools (table 1).

The vast majority (96 percent) of teachers were fully certified to teach in their principal field of assignment under the laws of the

States in which they were teaching. Public school teachers were more likely than those in private schools to be certified: 98 percent of public vs. 84 percent of private (table 1). Similarly among teachers newly hired for the 1983-84 school year, 88 percent were certified: 91 percent of public compared with 79 percent of private school teachers (table 2).

Readers should note that certification requirements differ from State to State and that certification by a State agency is not required for private school teachers in many States.

Teacher Hirings

From 1980 through 1983 there was negligible growth in the total number of elementary and secondary teachers in the Nation. Newly hired teachers during this period, therefore, were primarily replacements for teachers who were no longer employed at a given site because of retirement, job change, or death. In 1983, the 212,500 teachers newly hired by employing agencies and schools represented 7.9 percent of the total elementary-secondary teaching force. Particularly active was the private school labor market: 64,300 new hires represented 16.1 percent of all private school teachers. The public school market was more stable, with 148,200 new hires representing 6.5 percent of all public school teachers (table 3). This survey did not distinguish between teachers taking their first jobs and those moving from one employer to another.

Full-Time Equivalents

Many of the teachers employed in 1983-84 taught only part-time, including many who were in administration, guidance, and other nonteaching positions. When these are counted in full-time equivalents (FTE), the 2.7-million-strong teaching force shrinks slightly to 2,553,300 (FTE). Of this number, 2,216,200 (FTE) were teaching in public schools and 337,200 (FTE) in private schools (table 4).

Field of Assignment

Of these 2.6 million teachers (FTE) about one-third (34 percent) were in general elementary education. This assignment included 44 percent of all private school teachers and 33 percent of teachers in public schools. The second most prevalent assignment was special education, occupying 10 percent of all teachers. This field accounted for 11 percent of all public school teachers but only 4 percent of those in private schools. Nine percent of private school teachers and only 3 percent of teachers in public schools were teaching in preprimary grades. (Detailed figures for elementary and secondary instructional levels are found in tables 5 and 6.)

Teacher Shortages (FTE) by Field of Assignment

In this survey teacher shortages were defined as "positions vacant, abolished, or transferred to another field ... because a candidate was unable to be found." There are two aspects of such shortages to be considered: the number of positions unfilled or vacant and the ratio of unfilled or vacant positions to the number of teachers employed in a given field. In this report both numbers and ratios have been supplied.

Based on survey responses there were an estimated 3,965 teacher candidate shortages in the Nation's schools during the 1983-84 school year (table 7), representing shortages in less than 0.2 percent of all teaching positions. Several fields had a significant number of shortages relative to their population of teachers. These were special education, bilingual education, physical sciences, art, music, and computer science.

The impact of shortages on planned instructional programs varied by field. Although many shortages (742) occurred in general elementary education, their relative importance was negligible since the number of teachers employed in this area was so great (873,300). In bilingual education, however, although the number of shortages was much smaller (263), the impact on the availability of this instruction to those in need of it was much greater—a ratio of 8.8 shortages to every 1,000 teachers. The field of special education, on the other hand, had both a high number (1,027) and a relatively high ratio—3.9 per 1,000—of shortages. (Detailed figures for elementary and secondary instructional levels are found in tables 8 and 9.)

Teachers Not Certified in Their Assigned Fields

It is not uncommon for teachers to have some assignments in subject matter fields other than those for which they hold certification. This section deals with the full-time equivalent (FTE) of teacher assignments in the 1983-84 school year in which teachers were assigned to teach subjects for which they did not have regular or standard certification under the laws of the States in which they were teaching. The responses forming the basis for these estimates, like the others in this report, came from school and school district administrators and not from the teachers themselves. According to these administrators, "out-of-field teaching" accounted for about 3.5 percent of all instructional time in the Nation's schools at the time of the survey.

Fields with the highest proportion of instruction by uncertified personnel (table 10) were preprimary education (13.9 percent), bilingual education (12.0 percent), computer science (8.7 percent), physics, and foreign languages (both 5.6 percent). Fields with the lowest percent of uncertified teaching were home economics (less than 1 percent), industrial arts, and special education for the speech impaired (both 1.4 percent). (Detailed figures for elementary and secondary instructional levels are found in tables 11 and 12.)

Readers should be aware that certification regulations vary widely from State to State, so that conclusions about teacher quality or qualifications should not be based strictly on the presence or absence of certification in assignment field.

School Districts and Schools Reporting Teacher Shortages

About 4.8 percent (739) of all public education agencies and 1.7 percent (459) of all private schools reported a shortage of teacher candidates in one or more fields in the 1983-84 school year (table 13). According to the survey, settings in which shortages were most likely to appear were central cities (17.5 percent with shortages), large school districts (15.3 percent), and school districts in the Western region of the country (10.2 percent).*

Ten critical subject areas were analyzed separately from all other shortages. It was found that appreciable shortages in these fields were only evident in the large and central city school districts. Among the fields analyzed, elementary- and secondary-level special education shortages were reported by 6.5 and 5.3 percent, respectively, of the large districts. In addition, secondary-level mathematics and general science shortages were reported by 6.0 and 4.5 percent, respectively, of the central city districts (table 13).

Merit Pay and Incentives

About 5.5 percent of all private schools and 1.1 percent of public education agencies reported that they had some type of merit pay plan (table 14). Merit pay plans were found in a slightly higher proportion of large districts (2.9 percent of all districts with an enrollment of 10,000 or more) and of central city school districts (2.4 percent) than in other public education agencies.

Various types of incentives designed to recruit or retain desired teachers (such as cash bonuses, awards, and free retraining) were found in about 18 percent of both private schools and public education agencies (table 15). Among the public agencies, the largest number and percent using incentives were in the Southern region (962, or 28 percent of all districts in that region). A large proportion of large districts (26) and central city districts (21) also offered special incentives.

In addition to exploring the general use of incentives, the survey examined whether incentives were concentrated in five specific subject areas--physical sciences, mathematics, bilingual education, special education, and foreign languages--in which critical shortages were feared to exist. Relatively few employers reported offering special incentives in these areas. The highest incidence of subject-specific incentives was found in large school districts, of which about 8 percent offered incentives for mathematics teachers, 6 percent for teachers in the physical sciences, and 5 percent for special education teachers (table 15).

*Definitions of terms are provided in the tables and at the end of this report. Because of sampling limitations, no geographic or size breakdowns could be made for private schools.

The incentives offered took various forms, such as cash bonuses, higher steps on the salary schedule, and free retraining in new subject areas (table 16). The form used most often in the South was the cash bonus, while school districts in the Northeast and West, as well as private schools around the country, tended to offer a higher step on the salary schedule. Among very large school districts, about 10 percent offered free retraining, and 7 percent had a sabbatical program.

Technical Notes

The tables of estimates are followed by a set of tables of standard errors. Since the sample of units selected for the Survey of Teacher Demand and Shortage was only one of a large number of possible samples, the resulting statistics are subject to the sampling variability uniquely associated with that selection. The standard errors reported in the tables are measures of the variation attributable to sampling and are used to demonstrate the confidence which may be placed in the estimates. To further explain: If all possible samples were surveyed under similar conditions, intervals of 1.96 standard errors below to 1.96 standard errors above a reported statistic (estimate) would include the average result of all of these samples in approximately 95 percent of the cases. The following example is illustrative of the confidence to be placed in a reported statistic. The total number (in FTE) of employed teachers is estimated to be 2,553,300 (table 4) with a standard error of 25,983 (table 4S). Thus, it can be assumed that the average of estimates from all possible samples derived under similar survey conditions would fall within the interval from 2,502,373 to 2,604,227, which is $2,553,300 \pm 1.96 (25,983)$, with a probability of .95. The interval cited is called the 95% confidence interval. The smaller the interval for given confidence, the greater the precision of the estimate.

During preparation of this report, adjustments were made to the data on private schools and teachers to correspond to a revised Center for Education Statistics estimate of the total number of private schools in the Nation.

Persons requiring more information about this survey should contact the survey project officer, Mr. John P. Sietsema, at the Center for Education Statistics, 555 New Jersey Avenue NW, Washington, D.C., 20208-1401, telephone (202) 357-6335.

Regional Groupings Used in Tables

Northeastern: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont
North Central: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin
Southern: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia
Western: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming

Table 1.--Certification status of public and private school teachers by selected characteristics of employing institution: 50 States and D.C., November 1, 1983

Employing institution characteristics	Total	Certified teachers		Uncertified teachers	
		Number	Percent	Number	Percent
All institutions.....	2,691,600	2,589,100	96.2	102,600	3.8
Private schools.....	398,600	334,700	84.0	64,000	16.0
Public education agencies.....	2,293,000	2,254,400	98.3	38,600	1.7
Local education agencies.....	2,263,000	2,225,500	98.3	37,500	1.7
Intermediate education agencies ¹ ...	30,000	28,900	96.3	1,100	3.7
Local education agencies (LEA's)--level					
Elementary	94,000	92,800	98.7	1,200	1.3
Secondary	44,700	44,100	98.6	600	1.4
Unified ²	2,124,300	2,088,700	98.3	35,600	1.7
Public education agencies--region					
Northeastern.....	536,800	529,300	98.6	7,500	1.4
North Central.....	598,700	595,100	99.4	3,600	0.6
Southern.....	770,900	751,100	97.4	19,800	2.6
Western.....	386,600	379,000	98.0	7,600	2.0
Public education agencies--					
fall 1982 enrollment					
Under 1,000.....	273,300	267,400	97.9	5,800	2.1
1,000-9,999.....	1,115,200	1,101,100	98.7	14,100	1.3
10,000 and over.....	904,500	885,900	97.9	18,700	2.1
Public education agencies--					
metropolitan status					
SMSA ³ central city.....	506,000	496,500	97.7	11,500	2.3
SMSA noncentral city.....	1,013,100	999,300	98.6	13,800	1.4
Nonmetropolitan areas.....	772,000	758,600	98.3	13,300	1.7

¹ Agencies providing special services, usually vocational and special education, to areas greater than those served by single LEA's.

² LEA's providing elementary and secondary instruction.

³ Standard Metropolitan Statistical Area.

Note.--Percentages calculated on unrounded numbers. Because of rounding, details may not add to totals.



Table 2.--Certification status of newly hired public and private school teachers by selected characteristics of employing institution: 50 States and D.C., November 1, 1983

Employing institution characteristics	Total	Certified teachers		Uncertified teachers	
		Number	Percent	Number	Percent
All institutions.....	212,500	186,200	87.6	26,300	12.4
Private schools.....	64,300	50,900	79.1	13,400	20.9
Public education agencies.....	148,200	135,300	91.3	12,900	8.7
Local education agencies.....	146,300	133,600	91.3	12,700	8.7
Intermediate education agencies ¹	1,900	1,800	90.8	200	9.2
Local education agencies (LEA's)--level					
Elementary	7,200	6,600	91.7	600	8.3
Secondary	2,300	2,100	90.4	200	9.6
Unified ²	136,800	124,900	91.3	11,900	8.7
Public education agencies--region					
Northeastern.....	24,100	21,200	87.9	2,900	12.1
North Central.....	29,800	29,200	97.8	600	2.2
Southern.....	62,100	55,500	89.5	6,500	10.5
Western.....	32,200	29,400	91.3	2,800	8.7
Public education agencies-- fall 1982 enrollment					
Under 1,000.....	27,500	25,100	91.3	2,400	8.7
1,000-9,999.....	65,900	61,400	93.1	4,600	6.9
10,000 and over.....	54,800	48,900	89.2	5,900	10.8
Public education agencies-- metropolitan status					
SMSA ³ central city.....	27,700	23,800	86.0	3,900	14.0
SMSA noncentral city.....	60,900	56,700	93.0	4,300	7.0
Nonmetropolitan areas.....	59,500	54,800	92.0	4,700	8.0

¹ Agencies providing special services, usually vocational and special education, to areas greater than those served by single LEA's.

² LEA's providing elementary and secondary instruction.

³ Standard Metropolitan Statistical Area.

Note.--Percentages calculated on unrounded numbers. Because of rounding, details may not add to totals.

Table 3. Certification status of newly hired public and private school teachers as percent of total teachers, by selected characteristics of employing institution: 50 States and D. C., November 1, 1983

Employing institution characteristics	Total teachers	Newly hired teachers					
		Total		Certified		Uncertified	
		Number	Percent of total teachers	Number	Percent of total teachers	Number	Percent of total teachers
All institutions.....	2,691,600	212,500	7.9	186,200	6.9	26,300	1.0
Private schools.....	398,600	64,300	16.1	50,900	12.8	13,400	3.4
Public education agencies.....	2,293,000	148,200	6.5	135,300	5.9	12,900	0.6
Local education agencies.....	2,265,000	146,300	6.5	133,600	5.9	12,700	0.6
Intermediate education agencies ¹ ...	30,000	1,900	6.3	1,800	6.0	200	0.7
Local education agencies(LEA's)-level							
Elementary.....	94,000	7,200	7.7	6,600	7.0	600	0.6
Secondary.....	44,700	2,300	5.1	2,100	4.7	200	0.4
Unified ²	2,124,300	136,800	6.4	124,900	5.9	11,900	0.6
Public education agencies-region							
Northeastern.....	536,800	24,100	4.5	21,200	3.9	2,900	0.5
North Central.....	598,700	29,800	5.0	29,200	4.9	600	0.1
Southern.....	770,900	62,100	8.1	55,500	7.2	6,500	0.8
Western.....	386,600	32,200	8.3	29,400	7.6	2,800	0.7
Public education agencies-fall 1982 enrollment							
Under 1,000.....	273,300	27,500	10.1	25,100	9.2	2,400	0.9
1,000-9,999.....	1,115,200	65,900	5.9	61,400	5.5	4,600	0.4
10,000 and over.....	904,500	54,800	6.1	48,900	5.4	5,900	0.7
Public education agencies-metropolitan status							
SMSA ³ central city.....	508,000	27,700	5.5	23,800	4.7	3,900	0.8
SMSA noncentral city.....	1,013,100	60,900	6.0	56,700	5.6	4,300	0.4
Nonmetropolitan areas.....	772,000	59,500	7.7	54,800	7.1	4,700	0.6

¹ Agencies providing special services, usually vocational and special education, to areas greater than those served by single LEA's.

² LEA's providing elementary and secondary instruction.

³ Standard Metropolitan Statistical Area.

Note.--Percentages are calculated on unrounded numbers. Because of rounding, details may not add to totals.

Table 4.--Teachers* employed in public and private elementary and secondary schools, by field of assignment: 50 States and D.C., November 1, 1983

Field of assignment	Total		Public		Private	
	Number	Percent	Number	Percent	Number	Percent
Total.....	2,553,300	100.0	2,216,200	100.0	337,200	100.0
Preprimary education.....	89,100	3.5	58,200	2.6	30,900	9.2
General elementary education.....	873,300	34.2	726,200	32.8	147,100	43.6
Art.....	50,700	2.0	44,100	2.0	6,700	2.0
Basic skills/remedial education.....	42,300	1.7	38,500	1.7	3,800	1.1
Bilingual education.....	29,900	1.2	29,000	1.3	900	0.3
Biological and physical sciences....	131,100	5.1	114,700	5.2	16,400	4.9
Biology.....	28,800	1.1	24,800	1.1	4,000	1.2
Chemistry.....	14,600	0.6	12,100	0.5	2,500	0.7
Physics.....	8,700	0.3	7,100	0.3	1,600	0.5
General and all other sciences.....	78,900	3.1	70,700	3.2	8,200	2.4
Business (nonvocational).....	53,800	2.1	48,900	2.2	4,900	1.5
Computer science.....	9,200	0.4	6,800	0.3	2,400	0.7
English language arts.....	182,700	7.2	161,900	7.3	20,800	6.2
Foreign languages.....	50,400	2.0	39,400	1.8	11,000	3.3
Health, physical education.....	131,500	5.1	117,200	5.3	14,300	4.2
Home economics.....	38,100	1.5	36,600	1.7	1,500	0.5
Industrial arts.....	43,700	1.7	42,300	1.9	1,300	0.4
Mathematics.....	147,100	5.8	128,900	5.8	18,100	5.4
Music.....	79,100	3.1	70,000	3.2	9,100	2.7
Reading.....	47,700	1.9	43,400	2.0	4,400	1.3
Social studies/social sciences.....	142,400	5.6	126,900	5.7	15,400	4.6
Special education.....	264,100	10.3	250,100	11.3	14,000	4.1
Mentally retarded.....	54,400	2.1	52,300	2.4	2,100	0.6
Seriously emotionally disturbed..	26,800	1.0	22,900	1.0	3,800	1.1
Specific learning disabled.....	73,200	2.9	70,400	3.2	2,800	0.8
Speech impaired.....	27,700	1.1	26,900	1.2	800	0.2
Other special education.....	82,000	3.2	77,500	3.5	4,500	1.3
Vocational education.....	64,300	2.5	63,700	2.9	600	0.2
Other elementary education.....	29,800	1.2	27,200	1.2	2,600	0.8
Other secondary education.....	53,500	2.1	42,500	1.9	11,100	3.3

*In full-time equivalents.

Note.--Percentages calculated on unrounded numbers. Because of rounding, details may not add to totals.

Table 5.--Teachers* employed in public and private elementary schools, by field of assignment:
50 States and D.C., November 1, 1983

Field of assignment	Total		Public		Private	
	Number	Percent	Number	Percent	Number	Percent
Total elementary.....	1,428,800	100.0	1,205,500	100.0	223,300	100.0
Preprimary education.....	89,100	6.2	58,200	4.8	30,900	13.8
General elementary education.....	873,300	61.1	726,200	60.2	147,100	65.9
Art.....	19,600	1.4	16,700	1.4	2,800	1.3
Basic skills/remedial education..	30,000	2.1	27,300	2.3	2,700	1.2
Bilingual education.....	25,100	1.8	24,800	2.1	300	0.1
English language arts.....	23,000	1.6	19,400	1.6	3,600	1.6
Foreign languages.....	4,100	0.3	2,500	0.2	1,500	0.7
Health, physical education.....	43,800	3.1	37,700	3.1	6,100	2.7
Home economics.....	3,700	0.3	3,600	0.3	100	0.0
Industrial arts.....	3,800	0.3	3,700	0.3	100	0.0
Mathematics.....	20,800	1.5	17,500	1.5	3,300	1.5
Music.....	38,700	2.7	33,600	2.8	5,100	2.3
Reading.....	27,200	1.9	24,600	2.0	2,700	1.2
Science.....	15,500	1.1	12,700	1.1	2,800	1.3
Social studies/social sciences....	16,700	1.2	14,200	1.2	2,500	1.1
Special education.....	164,900	11.5	155,600	12.9	9,300	4.2
Mentally retarded.....	32,400	2.3	31,000	2.6	1,400	0.6
Seriously emotionally disturbed.	16,400	1.2	14,500	1.2	2,000	0.9
Specific learning disabled.....	44,000	3.1	42,000	3.5	2,000	0.9
Speech impaired.....	22,200	1.6	21,400	1.8	800	0.4
Other special education.....	49,900	3.5	46,700	3.9	3,200	1.4
All other elementary.....	29,800	2.1	27,200	2.3	2,600	1.2

*In full-time equivalents.

Note.--Percentages calculated on unrounded numbers. Because of rounding, details may not add to totals.

Table 6.--Teachers* employed in public and private secondary schools, by field of assignment:
50 States and D.C., November 1, 1983

Field of assignment	Total		Public		Private	
	Number	Percent	Number	Percent	Number	Percent
Total secondary.....	1,124,500	100.0	1,010,700	100.0	113,800	100.0
Art.....	31,100	2.8	27,300	2.7	3,800	3.4
Basic skills/remedial education....	12,300	1.1	11,200	1.1	1,100	1.0
Bilingual education.....	4,800	0.4	4,200	0.4	600	0.5
Biological and physical sciences...	115,600	10.3	102,000	10.1	13,600	11.9
Biology.....	28,800	2.6	24,800	2.5	4,000	3.5
Chemistry.....	14,600	1.3	12,100	1.2	2,500	2.2
Physics.....	8,700	0.8	7,100	0.7	1,600	1.4
General and all other sciences..	63,500	5.6	58,000	5.7	5,500	4.8
Business (nonvocational).....	53,800	4.8	48,900	4.8	4,900	4.3
Computer science.....	9,200	0.8	6,800	0.7	2,400	2.1
English language arts.....	159,700	14.2	142,400	14.1	17,200	15.1
Foreign languages.....	46,400	4.1	36,900	3.7	9,400	8.3
Health, physical education.....	87,700	7.8	79,500	7.9	8,200	7.2
Home economics.....	34,400	3.1	33,000	3.3	1,400	1.3
Industrial arts.....	39,900	3.5	38,600	3.8	1,300	1.1
Mathematics.....	126,300	11.2	111,400	11.0	14,800	13.0
Music.....	40,400	3.6	36,400	3.6	4,000	3.5
Reading.....	20,500	1.8	18,800	1.9	1,700	1.5
Social studies/social sciences.....	125,600	11.2	112,700	11.1	13,000	11.4
Special education.....	99,200	8.8	94,500	9.4	4,700	4.1
Mentally retarded.....	22,000	2.0	21,400	2.1	600	0.6
Seriously emotionally disturbed.	10,300	0.9	8,400	0.8	1,900	1.6
Specific learning disabled.....	29,200	2.6	28,400	2.8	800	0.7
Speech impaired.....	5,550	0.5	5,500	0.5	50	0.0
Other special education.....	32,200	2.9	30,800	3.1	1,300	1.2
Vocational education.....	64,300	5.7	63,700	6.3	600	0.6
All other secondary.....	53,500	4.8	42,500	4.2	11,100	9.7

*In full-time equivalents.

Note.--Percentages calculated on unrounded numbers. Because of rounding, details may not add to totals.

Table 7.--Teacher candidate shortages* in public and private elementary and secondary schools, as compared with total teachers, by field of assignment: 50 States and D.C., November 1, 1983

Field of assignment	Total teachers		Candidate shortages		Shortages per 1,000 teachers
	Number	Percent	Number	Percent	
Total.....	2,553,300	100.0	3,965	100.0	1.6
Preprimary education.....	89,100	3.5	80	2.0	0.9
General elementary education.....	873,300	34.2	742	18.7	0.8
Art.....	50,700	2.0	184	4.6	3.6
Basic skills/remedial education....	42,300	1.7	122	3.1	2.9
Bilingual education.....	29,900	1.2	263	6.6	8.8
Biological and physical sciences...	131,100	5.1	225	5.7	1.7
Biology.....	28,800	1.1	49	1.2	1.7
Chemistry.....	14,600	0.6	27	0.7	1.9
Physics.....	8,700	0.3	39	1.0	4.5
General and all other sciences..	79,000	3.1	111	2.8	1.4
Business (nonvocational).....	53,800	2.1	20	0.5	0.4
Computer science.....	9,200	0.4	34	0.9	3.7
English language arts.....	182,700	7.2	171	4.3	0.9
Foreign languages.....	50,400	2.0	77	1.9	1.5
Health, physical education.....	131,500	5.2	99	2.5	0.8
Home economics.....	38,100	1.5	27	0.7	0.7
Industrial arts.....	43,700	1.7	82	2.1	1.9
Mathematics.....	147,100	5.8	263	6.6	1.8
Music.....	79,100	3.1	243	6.1	3.1
Reading.....	47,700	1.9	20	0.5	0.4
Social studies/social sciences.....	142,400	5.6	67	1.7	0.5
Special education.....	264,100	10.3	1,027	25.9	3.9
Mentally retarded.....	54,400	2.1	153	3.9	2.8
Seriously emotionally disturbed.	26,800	1.0	99	2.5	3.7
Specific learning disabled.....	73,200	2.9	190	4.8	2.6
Speech impaired.....	27,700	1.1	175	4.4	6.3
Other special education.....	82,000	3.2	408	10.3	5.0
Vocational education.....	64,300	2.5	68	1.7	1.1
Other elementary education.....	29,800	1.2	33	0.8	1.1
Other secondary education.....	53,500	2.1	119	3.0	2.2

*In full-time equivalents.

Note.--Percentages are calculated on unrounded numbers. Because of rounding, details may not add to totals.

Table 8.--Teacher candidate shortages* in public and private elementary schools, as compared with total teachers, by field of assignment: 50 States and D.C., November 1, 1983

Field of assignment	Total teachers		Candidate shortages		Shortages per 1,000 teachers
	Number	Percent	Number	Percent	
Total elementary.....	1,428,800	100.0	2,317	100.0	1.6
Preprimary education.....	89,100	6.2	80	3.5	0.9
General elementary education.....	873,300	61.1	742	32.0	0.8
Art.....	19,600	1.4	89	3.8	4.5
Basic skills/remedial education....	30,000	2.1	81	3.5	2.7
Bilingual education.....	25,100	1.8	245	10.6	9.8
English language arts.....	23,000	1.6	12	0.5	0.5
Foreign languages.....	4,100	0.3	4	0.2	1.0
Health, physical education.....	43,800	3.1	33	1.4	0.8
Home economics.....	3,700	0.3	1	0.0	0.3
Industrial arts.....	3,800	0.3	2	0.1	0.5
Mathematics.....	20,800	1.5	86	3.7	4.1
Music.....	38,700	2.7	159	6.9	4.1
Reading.....	27,200	1.9	3	0.1	0.1
Science.....	15,500	1.1	61	2.6	3.9
Social studies/social sciences.....	16,700	1.2	0	0.0	0.0
Special education.....	164,900	11.5	690	29.8	4.2
Mentally retarded.....	32,400	2.3	80	3.5	2.5
Seriously emotionally disturbed.	16,400	1.1	59	2.5	3.6
Specific learning disabled.....	44,000	3.1	103	4.4	2.3
Speech impaired.....	22,200	1.6	141	6.1	6.4
Other special education.....	49,900	3.5	305	13.2	6.1
All other elementary.....	29,800	2.1	33	1.4	1.1

*In full-time equivalents.

Note.--Percentages are calculated on unrounded numbers. Because of rounding, details may not add to totals.

Table 9.--Teacher candidate shortages* in public and private secondary schools, as compared with total teachers, by field of assignment: 50 States and D.C., November 1, 1983

Field of assignment	Total teachers		Candidate shortages		Shortages per 1,000 teachers
	Number	Percent	Number	Percent	
Total secondary.....	1,124,500	100.0	1,647	100.0	1.5
Art.....	31,100	2.8	95	5.8	3.1
Basic skills/remedial education....	12,300	1.1	41	2.5	3.3
Bilingual education.....	4,800	0.4	18	1.1	3.8
Biological and physical sciences...	115,600	10.3	166	10.1	1.4
Biology.....	28,800	2.6	49	3.0	1.7
Chemistry.....	24,600	1.3	27	1.6	1.8
Physics.....	8,700	0.8	39	2.4	4.5
General and all other sciences..	63,500	5.6	50	3.0	0.8
Business (nonvocational).....	53,800	4.8	20	1.2	0.4
Computer science.....	9,200	0.8	34	2.1	3.7
English language arts.....	159,700	14.2	160	9.7	1.0
Foreign languages.....	46,400	4.1	73	4.4	1.6
Health, physical education.....	87,700	7.8	66	4.0	0.8
Home economics.....	34,400	3.1	26	1.6	0.8
Industrial arts.....	39,900	3.5	80	4.9	2.0
Mathematics.....	126,300	11.2	177	10.7	1.4
Music.....	40,400	3.6	84	5.1	2.1
Reading.....	20,500	1.8	16	1.0	0.8
Social studies/social sciences.....	125,600	11.2	67	4.1	0.5
Special education.....	99,200	8.8	337	20.5	3.4
Mentally retarded.....	22,000	2.0	74	4.5	3.4
Seriously emotionally disturbed.	10,300	0.9	40	2.4	3.9
Specific learning disabled.....	29,200	2.6	87	5.3	3.0
Speech impaired.....	5,500	0.5	34	2.1	6.2
Other special education.....	32,200	2.9	103	6.3	3.2
Vocational education.....	64,300	5.7	68	4.1	1.1
All other secondary.....	53,500	4.8	119	7.2	2.2

*In full-time equivalents.

Note.--Percentages are calculated on unrounded numbers. Because of rounding, details may not add to totals.

Table 10.--Uncertified teachers* as percent of total teachers in public and private elementary and secondary schools, by field of assignment: 50 States and D.C., November 1, 1983

Field of assignment	Total		Uncertified teachers		Uncertified as percent of total teachers
	Number	Percent	Number	Percent	
Total.....	2,553,300	100.0	88,260	100.0	3.5
Preprimary education.....	89,100	3.5	12,370	14.0	13.9
General elementary education.....	873,300	34.2	21,230	24.1	2.4
Art.....	50,700	2.0	1,590	1.8	3.1
Basic skills/remedial education....	42,300	1.7	840	0.9	2.0
Bilingual education.....	29,900	1.2	3,570	4.1	12.0
Biological and physical sciences...	131,100	5.1	5,360	6.1	4.1
Biology.....	28,800	1.1	1,090	1.2	3.8
Chemistry.....	14,600	0.6	590	0.7	4.1
Physics.....	8,700	0.3	490	0.6	5.6
General and all other sciences..	79,000	3.1	3,190	3.6	4.0
Business (nonvocational).....	53,800	2.1	990	1.1	1.8
Computer science.....	9,200	0.4	790	0.9	8.7
English language arts.....	182,700	7.2	4,560	5.2	2.5
Foreign languages.....	50,400	2.0	2,830	3.2	5.6
Health, physical education.....	131,500	5.1	2,920	3.3	2.2
Home economics.....	38,100	1.5	360	0.4	0.9
Industrial arts.....	43,700	1.7	620	0.7	1.4
Mathematics.....	147,100	5.8	6,080	6.9	4.1
Music.....	79,100	3.1	2,390	2.7	3.0
Reading.....	47,700	1.9	1,560	1.8	3.3
Social studies/social sciences.....	142,400	5.6	3,380	3.8	2.4
Special education.....	264,100	10.3	9,340	10.6	3.5
Mentally retarded.....	54,400	2.1	1,800	2.0	3.3
Seriously emotionally disturbed.	26,800	1.0	1,250	1.4	4.7
Specific learning disabled.....	73,200	2.9	3,050	3.5	4.2
Speech impaired.....	27,700	1.1	400	0.5	1.4
Other special education.....	82,000	3.2	2,840	3.2	3.5
Vocational education.....	64,300	2.5	2,350	2.7	3.6
Other elementary education.....	29,800	1.2	900	1.0	3.0
Other secondary education.....	53,500	2.1	4,220	4.8	7.9

*In full-time equivalents.

Note.--Percentages are calculated on unrounded numbers. Because of rounding, details may not add to totals.

Table 11.--Uncertified teachers* as percent of total teachers in public and private elementary schools, by field of assignment: 50 States and D.C., November 1, 1983

Field of assignment	Total teachers		Uncertified teachers		Uncertified as percent of total teachers
	Number	Percent	Number	Percent	
Total elementary.....	1,428,800	100.0	51,420	100.0	3.6
Preprimary education.....	89,100	6.2	12,370	24.1	13.9
General elementary education.....	873,300	61.1	21,230	41.3	2.4
Art.....	19,600	1.4	720	1.4	3.7
Basic skills/remedial education....	30,000	2.1	420	0.8	1.4
Bilingual education.....	25,100	1.8	2,980	5.8	11.9
English language arts.....	23,000	1.6	670	1.3	2.9
Foreign languages.....	4,100	0.3	490	0.9	12.0
Health, physical education.....	43,800	3.1	1,280	2.5	2.9
Home economics.....	3,700	0.3	40	0.1	1.2
Industrial arts.....	3,800	0.3	90	0.2	2.3
Mathematics.....	20,800	1.5	870	1.7	4.2
Music.....	38,700	2.7	1,480	2.9	3.8
Reading.....	27,200	1.9	1,060	2.1	3.9
Science.....	15,500	1.1	620	1.2	4.0
Social studies/social sciences.....	16,700	1.2	480	0.9	2.8
Special education.....	164,900	11.5	5,730	11.2	3.5
Mentally retarded.....	32,400	2.3	1,180	2.3	3.6
Seriously emotionally disturbed.	16,400	1.2	710	1.4	4.3
Specific learning disabled.....	44,000	3.1	1,720	3.3	3.9
Speech impaired.....	22,200	1.6	360	0.7	1.6
Other special education.....	49,900	3.5	1,760	3.4	3.5
All other elementary.....	29,800	2.1	900	1.8	3.0

*In full-time equivalents.

Note.--Percentages are calculated on unrounded numbers. Because of rounding, details may not add to totals.

Table 12.--Uncertified teachers* as percent of total teachers in public and private secondary schools, by field of assignment: 50 States and D.C., November 1, 1983

Field of assignment	Total teachers		Uncertified teachers		Uncertified as percent of total teachers
	Number	Percent	Number	Percent	
Total secondary.....	1,124,500	100.0	36,840	100.0	3.3
Art.....	31,100	2.8	870	2.4	2.8
Basic skills/remedial education....	12,300	1.1	420	1.1	3.4
Bilingual education.....	4,800	0.4	610	1.7	12.8
Biological and physical sciences...	115,600	10.3	4,730	12.8	4.1
Biology.....	28,800	2.6	1,090	2.9	3.8
Chemistry.....	14,600	1.3	590	1.6	4.1
Physics.....	8,700	0.8	490	1.3	5.6
General and all other sciences..	63,500	5.6	2,560	7.0	4.0
Business (nonvocational).....	53,800	4.8	990	2.7	1.8
Computer science.....	9,200	0.8	790	2.1	8.7
English language arts.....	159,700	14.2	3,890	10.5	2.4
Foreign languages.....	46,400	4.1	2,340	6.4	5.1
Health, physical education.....	87,700	7.8	1,640	4.4	1.9
Home economics.....	34,400	3.1	320	0.9	0.9
Industrial arts.....	39,900	3.5	540	1.5	1.3
Mathematics.....	126,300	11.2	5,210	14.2	4.1
Music.....	40,400	3.6	900	2.5	2.2
Reading.....	20,500	1.8	500	1.4	2.4
Social studies/social sciences.....	125,600	11.2	2,900	7.9	2.3
Special education.....	99,200	8.8	3,610	9.8	3.6
Mentally retarded.....	22,000	2.0	620	1.7	2.8
Seriously emotionally disturbed.	10,300	0.9	540	1.5	5.2
Specific learning disabled.....	29,200	2.6	1,330	3.6	4.6
Speech impaired.....	5,500	0.5	40	0.1	0.7
Other special education.....	32,200	2.9	1,080	2.9	3.3
Vocational education.....	64,300	5.7	2,350	6.4	3.6
All other secondary.....	53,500	4.8	4,220	11.5	7.9

*In full-time equivalents.

Note.--Percentages are calculated on unrounded numbers. Because of rounding, details may not add to totals.

Table 13.--Institutions with secondary-level candidate shortages in indicated assignment fields, by selected characteristics of employing institution:
50 States and D.C., November 1, 1983

Employing institution characteristics	Total educational institutions	Educational institutions with candidate shortages in secondary-level fields indicated											
		In any field		Mathematics		Physics		Chemistry		Computer science		General science	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Public education agencies.....	15,319	739	4.8	62	0.4	27	0.2	19	0.1	23	0.2	25	0.2
Local education agencies.....	14,953	727	4.9	62	0.4	27	0.2	19	0.1	23	0.2	25	0.2
Intermediate education agencies/i.	367	12	3.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Local education agencies(LEA's)--level													
Elementary	2,249	27	1.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Secondary	452	12	2.7	0	0.0	0	0.0	6	0.0	0	0.0	1	0.2
Unified/2.....	12,252	688	5.6	62	0.5	27	0.2	19	0.2	23	0.2	24	0.2
Public education agencies--region													
Northeastern.....	3,025	64	2.1	7	0.2	0	0.0	0	0.0	0	0.0	1	0.0
North Central.....	6,052	124	2.0	17	0.3	7	0.1	13	0.2	1	0.0	4	0.1
Southern.....	3,447	265	7.7	28	0.8	16	0.5	5	0.1	18	0.5	14	0.4
Western.....	2,795	286	10.2	11	0.4	4	0.1	1	0.0	3	0.1	5	0.2
Public education agencies-- fall 1982 enrollment													
Under 1,000.....	8,201	314	3.8	12	0.1	0	0.0	12	0.1	0	0.0	0	0.0
1,000-9,999.....	6,499	331	5.1	23	0.4	23	0.4	1	0.0	18	0.3	6	0.1
10,000 and over.....	619	95	15.3	27	4.4	4	0.6	5	0.8	4	0.6	19	3.1
Public education agencies-- metropolitan status													
SMSA/3 central city.....	331	58	17.5	20	6.0	1	0.3	2	0.6	2	0.6	15	4.5
SMSA noncentral city.....	5,139	217	4.2	19	0.4	12	0.2	2	0.0	6	0.1	3	0.1
Nonmetropolitan areas.....	9,849	464	4.7	24	0.2	14	0.1	15	0.2	14	0.1	8	0.1
Private schools.....	27,694	459	1.7	14	0.1	34	0.1	34	0.1	13	0.0	0	0.0

See footnotes at end of table.

Table 13.--Institutions with secondary-level shortages in indicated assignment fields, by selected characteristics of employing institution: 50 States and D.C., November, 1983--Continued

Employing institution characteristics	Total educational institutions	Educational institutions with candidate shortages in secondary-level fields indicated									
		In any field		Bilingual education		Special education		Industrial arts		Foreign language	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Public education agencies.....	15,319	739	4.8	10	0.1	157	1.0	26	0.2	68	0.4
Local education agencies.....	14,953	727	4.9	10	0.1	154	1.0	26	0.2	68	0.5
Intermediate education agencies/1.	367	12	3.3	0	0.0	3	0.8	0	0.0	0	0.0
Local education agencies(LEA's)--level											
Elementary	2,249	27	1.2	0	0.0	0	0.0	0	0.0	0	0.0
Secondary	452	12	2.7	0	0.0	6	1.3	0	0.0	2	0.4
Unified/2.....	12,252	688	5.6	10	0.1	148	1.2	26	0.2	66	0.5
Public education agencies--region											
Northeastern.....	3,025	64	2.1	0	0.0	16	0.5	19	0.6	4	0.1
North Central.....	6,052	124	2.0	2	0.0	56	0.9	2	0.0	20	0.3
Southern.....	3,447	265	7.7	4	0.1	60	1.7	4	0.1	33	1.0
Western.....	2,795	286	10.2	3	0.1	25	0.9	1	0.0	11	0.4
Public education agencies--											
fall 1982 enrollment											
Under 1,000.....	8,201	314	3.8	0	0.0	45	0.5	19	0.2	17	0.2
1,000-9,999.....	6,499	331	5.1	0	0.0	79	1.2	0	0.0	34	0.5
10,000 and over.....	619	95	15.3	10	1.6	33	5.3	8	1.3	17	2.7
Public education agencies--											
metropolitan status											
SMSA/3 central city.....	331	58	17.5	8	2.4	17	5.1	4	1.2	10	3.0
SMSA noncentral city.....	5,139	217	4.2	2	0.0	34	0.7	3	0.1	14	0.3
Nonmetropolitan areas.....	9,849	464	4.7	0	0.0	106	1.1	19	0.2	44	0.4
Private schools.....	27,694	459	1.7	0	0.0	32	0.1	31	0.1	4	0.0

1/Agencies providing special services, usually vocational and special education, to areas greater than those served by single LEA's.
 2/LEA's providing elementary and secondary education.
 3/Standard Metropolitan Statistical Area.

Note.--Percentages are calculated on unrounded numbers. Because of rounding, details may not add to totals.



Table 14.--Institutions with merit pay plans, by characteristics of employing institution: 50 States and D.C., November 1, 1983

Employing institution characteristics	Total educational institutions	Institutions having merit pay plan	
		Number	Percent
Public education agencies.....	15,319	168	1.1
Local education agencies.....	14,953	164	1.1
Intermediate education agencies ¹	367	5	1.4
Local education agencies (LEA's)--level			
Elementary	2,249	20	0.9
Secondary	452	5	1.1
Unified ²	12,252	139	1.1
Public education agencies--region			
Northeastern.....	3,025	7	0.2
North Central.....	6,052	92	1.5
Southern.....	3,447	56	1.6
Western.....	2,795	14	0.5
Public education agencies--			
fall 1982 enrollment			
Under 1,000.....	8,201	119	1.5
1,000-9,999.....	6,499	31	0.5
10,000 and over.....	619	18	2.9
Public education agencies--			
metropolitan status			
SMSA ³ central city.....	331	8	2.4
SMSA noncentral city.....	5,139	82	1.6
Nonmetropolitan areas.....	9,849	78	0.8
Private schools.....	27,694	1,521	5.5

¹ Agencies providing special services, usually vocational and special education, to areas greater than those served by single LEA's.

² LEA's providing elementary and secondary instruction.

³ Standard Metropolitan Statistical Area.

Note.--Percentages are calculated on unrounded numbers. Because of rounding, details may not add to totals.

Table 15.--Institutions offering subject-specific teacher incentives, by selected characteristics of employing institution:
50 States and D.C., November 1, 1983

Employing institution characteristics	Total educational institutions	Total offering incentives	Percent offering incentives in field named							
			Any field	All fields	Physical sciences	Mathematics	Bilingual education	Special education	Foreign language	Another field
Public education agencies.....	15,319	2,785	18.2	13.8	1.7	2.0	0.4	1.8	0.3	4.4
Local education agencies.....	14,953	2,749	18.4	17.1	1.8	2.0	0.4	1.7	0.3	4.4
Intermediate education agencies/1.....	367	35	9.5	4.1	0.0	0.4	0.0	5.1	0.0	5.0
Local education agencies (LEA's)--level										
Elementary	2,249	215	9.6	6.0	0.5	0.5	0.4	1.0	0.0	4.1
Secondary	452	35	7.7	3.1	5.3	5.3	3.9	4.2	0.3	4.9
Unified/2.....	12,252	2,500	20.4	16.0	1.8	2.2	0.3	1.7	0.3	4.4
Public education agencies--region										
Northeastern.....	3,025	514	17.0	15.3	0.6	0.9	0.1	1.3	0.7	0.9
North Central.....	6,052	869	14.4	10.1	1.1	0.7	0.0	1.0	0.2	5.2
Southern.....	3,447	962	27.9	19.7	3.6	5.1	0.7	3.2	0.1	7.0
Western.....	2,795	440	15.7	13.2	1.8	2.1	1.2	2.2	0.2	3.2
Public education agencies--										
all 1982 enrollment										
Under 1,000.....	8,201	1,607	19.6	15.7	1.2	0.9	0.2	1.3	0.0	4.4
1,000-9,999.....	6,499	1,017	15.6	11.1	2.0	2.8	0.5	2.1	0.6	4.1
10,000 and over.....	619	161	26.0	18.2	6.1	7.9	2.5	5.1	0.7	7.2
Public education agencies--										
metropolitan status										
MSA/3 central city.....	331	69	20.8	14.1	5.6	5.2	3.3	5.3	0.7	4.9
MSA noncentral city.....	5,139	987	19.2	14.1	2.6	3.1	0.4	2.9	0.3	4.0
Nonmetropolitan areas.....	9,849	1,729	17.6	13.7	1.1	1.3	0.3	1.1	0.7	4.6
Private schools.....	27,694	4,868	17.6	14.3	1.4	1.3	0.1	1.8	0.8	2.5

Agencies providing special services, usually vocational and special education, to areas greater than those served by single LEA's.
LEA's providing elementary and secondary instruction.

Standard Metropolitan Statistical Area.

Notes:--Percentages are calculated on unrounded numbers. Because of rounding, details may not add to totals.

16.--Institutions offering teacher incentives, by type of incentive and by selected characteristics of employing institution:
50 States and D.C., November 1, 1983

Employing institution characteristic	Total educational institutions	Total offering incentives	Percent offering incentives ¹ of type named							
			Cash bonus	Higher step on salary schedule	Free retraining	Award/recognition	Loan forgiveness	Released time	Sabbatical	Other
Education agencies.....	15,319	2,785	4.5	8.3	3.0	1.5	1.0	2.9	2.6	3.7
Elementary education agencies.....	14,959	2,749	4.6	8.3	3.0	1.5	1.0	2.9	2.6	3.7
Intermediate education agencies/1.....	359	35	2.7	5.0	3.7	1.0	0.0	2.1	1.9	3.2
Education agencies (LEA's)--level										
Elementary.....	2,249	215	1.5	6.3	2.5	0.0	0.4	1.4	0.7	0.4
Intermediate/2.....	452	35	0.0	1.3	5.2	0.8	0.8	4.7	1.3	1.5
Total.....	12,252	2,500	5.3	9.0	3.0	1.8	1.2	3.1	3.0	4.4
Education agencies--region										
Eastern.....	3,025	514	1.5	10.2	3.0	0.8	0.2	2.2	3.3	8.7
Central.....	6,052	869	1.5	7.3	1.3	1.3	1.7	3.9	1.9	0.9
Northern.....	3,447	962	15.0	7.6	4.6	1.8	0.7	1.4	3.1	5.3
Southern.....	2,795	440	1.5	9.0	4.7	2.3	0.6	3.3	2.5	2.3
Education agencies--1982 enrollment										
1,000.....	8,201	1,607	3.8	10.6	2.4	1.0	1.0	2.2	1.9	4.4
1,000-9,999.....	6,499	1,017	5.3	5.5	3.1	1.9	0.9	3.6	2.9	2.5
10,000 and over.....	619	161	6.2	6.2	9.8	4.0	2.3	3.9	7.4	7.1
Education agencies--metropolitan status										
Outside central city.....	331	69	6.6	5.0	7.6	2.7	3.0	1.0	5.4	6.1
Noncentral city.....	5,139	987	3.5	8.4	3.0	1.5	0.9	4.5	4.2	3.3
Metropolitan areas.....	9,849	1,729	5.0	8.3	2.9	1.4	1.0	2.1	1.6	3.8
Public schools.....	27,694	4,868	4.4	11.6	4.3	3.6	1.4	2.4	1.7	3.4

¹Agencies providing special services, usually vocational and special education, to areas greater than those served by single LEA's.
²Providing elementary and secondary instruction.

³Standard Metropolitan Statistical Area.

⁴Percentages are calculated on unrounded numbers. Because of rounding, details may not add to totals.

Table 1S.--Standard errors for estimates of certified and uncertified teachers in public and private schools in the United States: November 1, 1983

Employing institution characteristics	Total	Certified teachers		Uncertified teachers	
		Number	Percent	Number	Percent
All institutions.....	26,409	24,787	0.20	5,683	0.20
Private schools.....	7,535	5,404	1.34	6,115	1.34
Public education agencies.....	25,588	24,341	0.08	2,053	0.08
Local education agencies.....	25,472	24,218	0.08	2,051	0.08
Intermediate education agencies...	2,442	2,441	0.42	90	0.42
Local education agencies-level					
Elementary	4,018	4,083	0.67	628	0.67
Secondary	2,685	2,621	0.29	142	0.29
Unified	27,111	25,841	0.08	1,970	0.08
Public education agencies-region					
Northeastern.....	16,956	16,202	0.20	1,188	0.20
North Central.....	7,988	8,019	0.10	625	0.10
Southern.....	17,492	16,334	0.13	1,353	0.13
Western.....	4,059	4,217	0.20	764	0.20
Public education agencies- fall 1982 enrollment					
Under 1,000.....	18,398	17,692	0.44	1,377	0.44
1,000-9,999.....	19,640	18,615	0.12	1,525	0.12
10,000 and over.....	4,964	4,897	0.03	251	0.03
Public education agencies- metropolitan status					
SMSA central city.....	157	157	0.00	0	0.00
SMSA non-central city.....	18,037	16,923	0.12	1,432	0.12
Nonmetropolitan areas.....	19,335	18,673	0.18	1,493	0.18

Table 2S.--Standard errors for estimates of certified and uncertified newly hired teachers in public and private schools in the United States: November 1, 1983

Employing institution characteristics	Total	Certified teachers		Uncertified teachers	
		Number	Percent	Number	Percent
All institutions.....	5,015	4,087	0.61	1,582	0.61
Private schools.....	2,565	1,892	1.72	1,403	1.72
Public education agencies.....	4,495	3,744	0.50	1,012	0.50
Local education agencies.....	4,494	3,742	0.51	1,011	0.51
Intermediate education agencies...	105	110	1.75	32	1.75
Local education agencies-level					
Elementary	761	826	4.45	314	4.45
Secondary	282	257	3.07	78	3.07
Unified	4,541	3,760	0.49	968	0.49
Public education agencies-region					
Northeastern.....	4,025	3,298	1.29	756	1.29
North Central.....	1,124	1,111	0.27	80	0.27
Southern.....	1,404	1,027	0.70	544	0.70
Western.....	897	939	1.20	387	1.20
Public education agencies-fall 1982 enrollment					
Under 1,000.....	4,185	3,504	2.12	852	2.12
1,000-9,999.....	1,716	1,399	0.73	555	0.73
10,000 and over.....	381	354	0.12	74	0.12
Public education agencies-metropolitan status					
SMSA central city.....	11	11	0.01	0	0.01
SMSA non-central city.....	1,516	1,175	0.76	538	0.76
Nonmetropolitan areas.....	4,248	3,570	1.03	864	1.03

Table 3S. Standard errors for estimates of newly hired public and private school teachers, by certification status and selected characteristics of employing institution: 50 States and D. C., November 1, 1983

Employing institution characteristics	Total teachers	Newly hired teachers		
		Total	Certified	Uncertified
All institutions.....	26,409	5,015	4,087	1,582
Private schools.....	7,535	2,565	1,892	1,403
Public education agencies.....	25,588	4,495	3,744	1,012
Local education agencies.....	25,472	4,494	3,742	1,011
Intermediate education agencies .	2,442	105	110	32
Local education agencies-level				
Elementary.....	4,018	761	826	314
Secondary.....	2,685	282	257	78
Unified.....	27,111	4,541	3,760	968
Public education agencies-region				
Northeastern.....	16,956	4,025	3,298	756
North Central.....	7,988	1,124	1,111	80
Southern.....	17,492	1,404	1,027	544
Western.....	4,059	897	939	387
Public education agencies- fall 1982 enrollment				
Under 1000.....	18,398	4,185	3,504	852
1000-9999.....	19,640	1,716	1,399	555
10,000 and over.....	4,964	381	354	74
Public education agencies- metropolitan status				
SMSA central city.....	157	11	11	0
SMSA non-central city.....	18,037	1,516	1,175	538
Nonmetropolitan areas.....	19,335	4,248	3,570	864

Table 4S.--Standard errors for estimates of teachers employed in public and private elementary and secondary schools, by field of assignment: 50 States and D. C., November 1, 1983

Field of assignment	Total		Public		Private	
	Number	Percent	Number	Percent	Number	Percent
Total.....	25,983	0.0	25,176	0.0	6,565	0.0
Preprimary education.....	5,077	0.19	1,174	0.05	5,047	1.38
General elementary education.....	9,922	0.19	9,215	0.16	3,757	1.05
Art.....	738	0.02	668	0.02	320	0.10
Basic skills/remedial education.....	1,062	0.04	947	0.04	490	0.15
Bilingual education.....	789	0.03	747	0.04	259	0.08
Biological and physical sciences....	1,535	0.03	1,461	0.03	483	0.15
Biology.....	531	0.02	508	0.02	158	0.05
Chemistry.....	209	0.01	186	0.01	98	0.03
Physics.....	182	0.01	157	0.01	94	0.03
General and all other sciences.....	1,219	0.03	1,157	0.03	389	0.12
Business (non-vocational).....	721	0.02	681	0.02	242	0.07
Computer science.....	252	0.01	198	0.01	159	0.05
English language arts.....	2,230	0.04	2,136	0.04	655	0.20
Foreign languages.....	804	0.02	705	0.02	396	0.12
Health, physical education.....	1,516	0.04	1,409	0.03	571	0.16
Home economics.....	664	0.02	651	0.02	133	0.04
Industrial arts.....	805	0.02	792	0.03	144	0.04
Mathematics.....	1,857	0.03	1,779	0.03	541	0.17
Music.....	1,194	0.03	1,099	0.02	478	0.14
Reading.....	993	0.03	893	0.03	443	0.13
Social studies/social sciences.....	1,778	0.04	1,716	0.03	477	0.15
Special education.....	3,914	0.10	3,666	0.09	1,402	0.42
Mentally retarded.....	1,127	0.04	990	0.04	549	0.16
Seriously emotionally disturbed..	928	0.04	451	0.02	829	0.25
Specific learning disabled.....	1,397	0.04	1,350	0.05	368	0.11
Speech impaired.....	460	0.02	430	0.02	168	0.05
Other special education.....	2,158	0.07	1,984	0.07	867	0.26
Vocational education.....	1,199	0.04	1,185	0.05	188	0.06
Other elementary education.....	1,340	0.05	1,168	0.05	672	0.20
Other secondary education.....	1,234	0.05	993	0.05	750	0.02

Table 5S.--Standard errors for estimates of teachers employed in public and private elementary schools, by field of assignment: 50 States and D. C., November 1, 1983

Field of assignment	Total		Public		Private	
	Number	Percent	Number	Percent	Number	Percent
Total elementary.....	14,776	0.00	13,508	0.00	6,117	0.00
Preprimary education.....	5,076	0.34	1,171	0.09	5,046	1.98
General elementary education.....	9,696	0.34	8,984	0.25	3,726	1.82
Art.....	454	0.03	369	0.02	271	0.12
Basic skills/remedial education...	925	0.06	813	0.06	451	0.20
Bilingual education.....	714	0.05	707	0.06	102	0.05
English language arts.....	714	0.05	568	0.05	442	0.20
Foreign languages.....	241	0.02	109	0.01	220	0.10
Health, physical education.....	776	0.04	640	0.04	448	0.20
Home economics.....	133	0.01	123	0.01	51	0.02
Industrial arts.....	132	0.01	128	0.01	33	0.01
Mathematics.....	610	0.04	483	0.04	380	0.17
Music.....	815	0.04	707	0.04	416	0.19
Reading.....	809	0.05	721	0.05	375	0.17
Science.....	516	0.04	412	0.04	317	0.14
Social studies/social sciences....	544	0.04	455	0.04	305	0.14
Special education.....	2,798	0.13	2,578	0.12	1,113	0.50
Mentally retarded.....	822	0.05	698	0.05	443	0.20
Seriously emotionally disturbed.	714	0.05	290	0.03	666	0.30
Specific learning disabled.....	956	0.06	898	0.06	337	0.15
Speech impaired.....	402	0.03	368	0.03	167	0.07
Other special education.....	1,600	0.10	1,470	0.10	645	0.29
All other elementary.....	1,337	0.09	1,164	0.10	672	0.30

Table 6S.--Standard errors for estimates of teachers employed in public and private secondary by field of assignment: 50 States and D. C., November 1, 1983

Field of assignment	Total		Public		Private
	Number	Percent	Number	Percent	Number
Total secondary.....	9,458	0.00	9,257	0.00	1,980
Art.....	350	0.03	308	0.02	169
Basic skills/remedial education....	361	0.03	323	0.03	162
Bilingual education.....	252	0.02	108	0.01	233
Biological and physical sciences...	1,191	0.06	1,137	0.06	362
Biology.....	525	0.04	504	0.04	151
Chemistry.....	215	0.02	191	0.02	99
Physics.....	192	0.02	169	0.02	94
General and all other sciences..	923	0.06	891	0.06	245
Business (non-vocational).....	589	0.04	542	0.04	237
Computer science.....	256	0.02	203	0.02	159
English language arts.....	1,611	0.06	1,557	0.05	423
Foreign languages.....	569	0.04	474	0.03	321
Health, physical education.....	891	0.05	844	0.05	293
Home economics.....	437	0.03	422	0.03	117
Industrial arts.....	559	0.04	541	0.04	142
Mathematics.....	1,380	0.05	1,332	0.05	370
Music.....	441	0.03	411	0.03	163
Reading.....	424	0.03	389	0.03	173
Social studies/social sciences.....	1,375	0.06	1,342	0.06	304
Special education.....	1,472	0.10	1,333	0.10	636
Mentally retarded.....	492	0.04	417	0.04	268
Seriously emotionally disturbed.	516	0.05	261	0.03	455
Specific learning disabled.....	570	0.05	501	0.05	277
Speech impaired.....	156	0.01	155	0.02	13
Other special education.....	823	0.06	752	0.06	340
Vocational education.....	1,182	0.09	1,168	0.10	187
All other secondary.....	1,184	0.11	956	0.10	714

Table 7S.--Standard errors for estimates of full-time equivalent teacher shortages in public and private elementary and secondary schools, by field of assignment: 50 States and D.C., November 1, 1983

Field of assignment	Total teachers		Candidate shortages		Shortages per 1,000 teachers
	Number	Percent	Number	Percent	
Total.....	25,983	0.00	249	0.00	0.10
Preprimary education.....	5,077	0.19	38	0.95	0.43
General elementary education.....	9,922	0.19	107	2.43	0.12
Art.....	738	0.02	74	1.76	1.46
Basic skills/remedial education....	1,062	0.04	14	0.39	0.35
Bilingual education.....	789	0.03	5	0.43	0.29
Biological and physical sciences...	1,535	0.03	39	0.92	0.30
Biology.....	531	0.02	13	0.33	0.47
Chemistry.....	209	0.01	8	0.21	0.57
Physics.....	182	0.01	17	0.41	1.94
General and all other sciences..	1,219	0.03	28	0.69	0.36
Business (non-vocational).....	721	0.02	4	0.10	0.07
Computer science.....	252	0.01	16	0.39	1.76
English language arts.....	2,230	0.04	31	0.76	0.17
Foreign languages.....	804	0.02	23	0.56	0.45
Health, physical education.....	1,516	0.04	7	0.23	0.06
Home economics.....	664	0.02	11	0.29	0.30
Industrial arts.....	805	0.02	27	0.68	0.63
Mathematics.....	1,857	0.03	73	1.69	0.50
Music.....	1,194	0.03	72	1.58	0.91
Reading.....	993	0.03	3	0.08	0.06
Social studies/social sciences.....	1,778	0.04	6	0.18	0.04
Special education.....	3,914	0.10	82	2.04	0.31
Mentally retarded.....	1,127	0.04	47	1.16	0.85
Seriously emotionally disturbed.	928	0.04	14	0.36	0.56
Specific learning disabled.....	1,397	0.04	16	0.48	0.22
Speech impaired.....	460	0.02	35	0.86	1.27
Other special education.....	2,158	0.07	48	1.23	0.59
Vocational education.....	1,199	0.04	6	0.18	0.09
Other elementary education.....	1,340	0.05	3	0.08	0.10
Other secondary education.....	1,234	0.05	19	0.49	0.36

Table 88.—Standard errors for estimates of full-time equivalent teacher and teacher shortages in public and private elementary schools, by field of assignment: 50 States and D.C., November 1, 1983

Field of assignment	Total teachers		Candidate shortages		Shortages per 1,000 teachers
	Number	Percent	Number	Percent	
Total elementary.....	14,776	0.00	202	0.00	0.14
Preprimary education.....	5,076	0.34	38	1.62	0.43
General elementary education.....	9,696	0.34	107	3.96	0.12
Art.....	454	0.03	52	2.13	2.68
Basic skills/remedial education....	925	0.06	3	0.33	0.14
Bilingual education.....	714	0.05	5	0.95	0.34
English language arts.....	714	0.05	8	0.33	0.34
Foreign languages.....	241	0.02	0	0.02	0.11
Health, physical education.....	776	0.04	3	0.19	0.08
Home economics.....	133	0.01	0	0.00	0.01
Industrial arts.....	132	0.01	0	0.01	0.02
Mathematics.....	610	0.04	71	2.91	3.42
Music.....	815	0.04	66	2.45	1.71
Reading.....	809	0.05	0	0.01	0.00
Science.....	516	0.04	28	1.16	1.79
Social studies/social sciences....	544	0.04	0	0.00	0.00
Special education.....	2,798	0.13	62	3.11	0.38
Mentally retarded.....	822	0.05	26	1.13	0.78
Seriously emotionally disturbed.	714	0.05	6	0.34	0.40
Specific learning disabled.....	956	0.06	14	0.70	0.32
Speech impaired.....	402	0.03	32	1.38	1.42
Other special education.....	1,600	0.10	43	1.98	0.88
All other elementary.....	1,337	0.09	3	0.16	0.10

Table 98.—Standard errors for estimates of full-time equivalent teacher and teacher shortages in public and private secondary schools, by field of assignment: 50 States and D.C., November 1, 1983

Field of assignment	Total teachers		Candidate shortages		Shortages per 1,000 teachers
	Number	Percent	Number	Percent	
Total secondary.....	9,458	0.00	138	0.00	0.12
Art.....	350	0.03	52	2.97	1.66
Basic skills/remedial education....	361	0.03	14	0.83	1.13
Bilingual education.....	252	0.02	0	0.09	0.20
Biological and physical sciences...	1,191	0.06	27	1.34	0.24
Biology.....	525	0.04	13	0.76	0.47
Chemistry.....	215	0.02	8	0.47	0.57
Physics.....	192	0.02	17	0.94	1.94
General and all other sciences..	923	0.06	3	0.33	0.05
Business (non-vocational).....	589	0.04	4	0.24	0.07
Computer science.....	256	0.02	16	0.90	1.76
English language arts.....	1,611	0.06	30	1.66	0.19
Foreign languages.....	569	0.04	23	1.27	0.49
Health, physical education.....	891	0.05	6	0.50	0.07
Home economics.....	437	0.03	11	0.70	0.33
Industrial arts.....	559	0.04	27	1.59	0.69
Mathematics.....	1,380	0.05	16	1.03	0.13
Music.....	441	0.03	28	1.50	0.69
Reading.....	424	0.03	3	0.20	0.15
Social studies/social sciences....	1,375	0.06	6	0.47	0.05
Special education.....	1,472	0.10	45	2.23	0.46
Mentally retarded.....	492	0.04	32	1.88	1.44
Seriously emotionally disturbed.	516	0.05	13	0.74	1.29
Specific learning disabled.....	570	0.05	6	0.56	0.22
Speech impaired.....	156	0.01	15	0.82	2.65
Other special education.....	823	0.06	18	1.02	0.56
Vocational education.....	1,182	0.09	6	0.49	0.09
All other secondary.....	1,184	0.11	19	1.16	0.36

Table 108.—Standard Errors for Estimates of Uncertified Teachers (in Full-time Equivalents) in Public and Private Elementary and Secondary Schools, by Field of Assignment: 50 States and D. C., November 1, 1983

Field of assignment	Total teachers		Uncertified teachers		Uncertified as percent of current teachers
	Number	Percent	Number	Percent	
Total.....	25,983	0.00	5,461	0.00	0.20
Preprimary education.....	5,077	0.19	4,160	4.12	3.98
General elementary education.....	9,922	0.19	2,024	1.99	0.23
Art.....	738	0.02	152	0.19	0.30
Basic skills/remedial education....	1,062	0.04	125	0.15	0.29
Bilingual education.....	789	0.03	205	0.34	0.62
Biological and physical sciences...	1,535	0.03	323	0.43	0.23
Biology.....	531	0.02	92	0.11	0.30
Chemistry.....	209	0.01	56	0.07	0.38
Physics.....	182	0.01	60	0.07	0.70
General and all other sciences..	1,219	0.03	261	0.32	0.30
Business (non-vocational).....	721	0.02	174	0.20	0.32
Computer science.....	252	0.01	80	0.10	0.84
English language arts.....	2,230	0.04	274	0.37	0.15
Foreign languages.....	804	0.02	291	0.33	0.54
Health, physical education.....	1,516	0.04	271	0.32	0.20
Home economics.....	664	0.02	61	0.07	0.16
Industrial arts.....	805	0.02	83	0.10	0.19
Mathematics.....	1,857	0.03	360	0.48	0.22
Music.....	1,194	0.03	214	0.36	0.37
Reading.....	993	0.03	238	0.25	0.43
Social studies/social sciences.....	1,778	0.04	570	0.31	0.16
Special education.....	3,914	0.10	225	0.80	0.19
Mentally retarded.....	1,127	0.04	197	0.26	0.39
Seriously emotionally disturbed.	928	0.04	223	0.24	0.70
Specific learning disabled.....	1,397	0.04	121	0.32	0.30
Speech impaired.....	460	0.02	324	0.14	0.44
Other special education.....	2,153	0.07	216	0.38	0.34
Vocational education.....	1,199	0.04	357	0.27	0.33
Other elementary education.....	1,340	0.05	469	0.41	1.16
Other secondary education.....	1,234	0.05	19	0.56	0.83

Table 118.—Standard Errors for Estimates of Uncertified Teachers (in Full-time Equivalents) in Public and Private Elementary Schools, by Field of Assignment: 50 States and D. C., November 1, 1983

Field of assignment	Total teachers		Uncertified teachers		Uncertified as percent of current teachers
	Number	Percent	Number	Percent	
Total elementary.....	14,776	0.00	4,923	0.00	0.33
Preprimary education.....	5,076	0.34	4,160	6.27	3.98
General elementary education.....	9,696	0.34	2,025	3.97	0.23
Art.....	454	0.03	121	0.26	0.61
Basic skills/remedial education....	925	0.06	91	0.19	0.30
Bilingual education.....	714	0.05	193	0.67	0.68
English language arts.....	714	0.05	108	0.23	0.45
Foreign languages.....	241	0.02	116	0.24	2.56
Health, physical education.....	775	0.04	194	0.42	0.43
Home economics.....	133	0.01	14	0.03	0.37
Industrial arts.....	132	0.01	21	0.04	0.53
Mathematics.....	610	0.04	109	0.26	0.50
Music.....	815	0.04	253	0.55	0.63
Reading.....	809	0.05	195	0.41	0.69
Science.....	516	0.04	125	0.26	0.78
Social studies/social sciences.....	544	0.04	109	0.23	0.63
Special education.....	2,798	0.13	466	1.32	0.25
Mentally retarded.....	822	0.05	204	0.45	0.60
Seriously emotionally disturbed.	714	0.05	182	0.38	1.04
Specific learning disabled.....	956	0.06	200	0.49	0.44
Speech impaired.....	402	0.03	120	0.25	0.55
Other special education.....	1,600	0.10	240	0.55	0.41
All other elementary.....	1,337	0.09	357	0.71	1.16

Table 128.—Standard Errors for Estimates of Uncertified Teachers (in Full-time Equivalents) in Public and Private Secondary Schools, by Field of Assignment: 50 States and D. C., November 1, 1983

Field of assignment	Total teachers		Uncertified teachers		Uncertified as percent of current teachers
	Number	Percent	Number	Percent	
Total secondary.....	9,458	0.00	1,604	0.00	0.13
Art.....	350	0.03	87	0.23	0.27
Basic skills/remedial education....	361	0.03	63	0.17	0.51
Bilingual education.....	252	0.02	39	0.14	0.98
Biological and physical sciences...	1,191	0.06	294	0.54	0.25
Biology.....	525	0.04	91	0.21	0.30
Chemistry.....	215	0.02	56	0.14	0.38
Physics.....	192	0.02	58	0.15	0.65
General and all other sciences..	923	0.06	232	0.52	0.35
Business (non-vocational).....	589	0.04	172	0.45	0.32
Computer science.....	256	0.02	80	0.21	0.83
English language arts.....	1,611	0.06	230	0.47	0.14
Foreign languages.....	569	0.04	258	0.52	0.54
Health, physical education.....	891	0.05	156	0.38	0.18
Home economics.....	437	0.03	59	0.16	0.17
Industrial arts.....	559	0.04	80	0.21	0.20
Mathematics.....	1,380	0.05	335	0.58	0.24
Music.....	441	0.03	98	0.25	0.24
Reading.....	424	0.03	63	0.17	0.30
Social studies/social sciences....	1,375	0.06	193	0.39	0.15
Special education.....	1,472	0.10	205	0.58	0.20
Mentally retarded.....	492	0.04	98	0.27	0.42
Seriously emotionally disturbed.	516	0.05	63	0.18	0.60
Specific learning disabled.....	570	0.05	111	0.32	0.36
Speech impaired.....	156	0.01	12	0.03	0.21
Other special education.....	823	0.06	100	0.26	0.28
Vocational education.....	1,182	0.09	217	0.52	0.32
All other secondary.....	1,184	0.11	489	1.24	0.86

Table 138.—Standard errors for number of public education agencies and private schools with teacher candidate shortages in indicated assignment fields by selected characteristics of employing institution: 50 States and D. C., November 1, 1983

Employing institution characteristics			Educational institutions with candidate shortages in secondary-level fields indicated				
	Total educational institutions	In any Field Number	Mathematics Number	Physics Number	Chemistry Number	Computer Science Number	General Science Number
Public education agencies.....	316	119	14	16	12	14	4
Local education agencies.....	314	119	14	16	12	14	4
Intermediate education agencies	35	3	0	0	0	0	0
Local education agencies (LEA's)—level							
Elementary	276	3	0	0	0	0	0
Secondary	107	5	0	0	0	0	0
Unified	387	118	14	16	12	14	4
Public education agencies—region							
Northeastern.....	110	21	3	0	0	0	0
North Central.....	340	39	12	7	12	0	0
Southern.....	169	47	6	14	1	14	3
Western.....	245	100	3	2	0	2	3
Public education agencies—fall 1982 enrollment							
Under 1,000.....	325	112	12	0	12	0	0
1,000–9,999.....	79	41	7	16	1	14	4
10,000 and over.....	9	3	1	2	0	0	0
Public education agencies—metropolitan status							
MSA central city.....	3	0	0	0	0	0	0
MSA noncentral city.....	225	74	5	8	0	3	0
Nonmetropolitan areas.....	409	94	13	14	12	14	4
Private schools.....	738	103	8	23	23	8	0

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Table 138.—Standard errors for number of public education agencies and private schools with teacher candidate shortages in indicated assignment fields by selected characteristics of employing institution: 50 States and D. C., November 1, 1963—Continued

Employing institution characteristics	Educational institutions with candidate shortages in secondary-level fields indicated					
	Total Educational Institutions	In any field	Bilingual	Special	Industrial	Foreign
			Education	Education	Arts	Language
	Number	Number	Number	Number	Number	Number
Public education agencies.....	316	119	0	39	19	25
Local education agencies.....	314	119	0	39	19	25
Intermediate education agencies	35	3	0	0	0	0
Local education agencies (LEA's)—level						
Elementary	276	13	0	0	0	0
Secondary	107	5	0	3	0	2
Unified	387	118	0	38	19	25
Public education agencies—region						
Northeastern.....	110	21	0	6	19	3
North Central.....	340	39	0	33	0	17
Southern.....	169	47	0	17	0	17
Western.....	245	100	0	7	0	5
Public education agencies— fall 1962 enrollment						
Under 1000.....	325	112	0	33	19	17
1000-9999.....	79	41	0	20	0	18
10,000 and over.....	9	3	0	2	0	2
Public Education Agencies— Metropolitan status						
SMA central city.....	3	0	0	0	0	0
SMA noncentral city.....	225	74	0	7	0	5
Nonmetropolitan Areas.....	409	94	0	38	19	24
Private schools.....	738	103	0	27	20	4

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Table 14S.--Standard errors for estimates of institutions with merit pay plans, by characteristics of institution: 50 States and D.C., November 1, 1983

Employing institution characteristics	Total educational institutions	Institutions having merit pay plan	
		Number	Percent
Public education agencies.....	316	62	0.4
Local education agencies.....	314	62	0.4
Intermediate education agencies ¹	35	4	1.0
Local education agencies(LEA's)--level			
Elementary	276	20	0.9
Secondary	107	3	0.8
Unified ²	387	59	0.5
Public education agencies--region			
Northeastern.....	110	3	0.1
North Central.....	340	47	0.8
Southern.....	169	40	1.2
Western.....	245	7	0.2
Public education agencies--			
fall 1982 enrollment			
Under 1,000.....	325	60	0.7
1,000-9,999.....	79	14	0.2
10,000 and over.....	9	2	0.3
Public education agencies--			
metropolitan status			
SMSA ³ central city.....	3	0	0.0
SMSA noncentral city.....	225	45	0.9
Nonmetropolitan areas.....	409	43	0.4
Private schools.....	738	282	5.5

¹Agencies providing special services, usually vocational and special education, to areas greater than those served by single LEA's.

²LEA's providing elementary and secondary instruction.

³Standard Metropolitan Statistical Area.

Note: Percentages are calculated on unrounded numbers. Because of rounding, details may not add to totals.

Table 155.—Standard errors for public education agencies and private schools offering special incentives to recruit or retain teachers, by field of incentive and by selected characteristics of institutions: 50 States and D. C., School Year 1983-84

Employing institution characteristics	Total Educational Institutions	Total Offering Incentives	Percent Offering Incentives in Field Named							
			In Any Field	In All Fields	In Physical Sciences	In Mathematics	In Bilingual Education	In Special Education	In Foreign Language	In Another Field
Public education agencies.....	316	282	1.84	1.70	0.31	0.30	0.14	0.35	0.12	0.70
Local education agencies.....	314	282	1.89	1.74	0.31	0.31	0.14	0.35	0.12	0.72
Intermediate education agencies ...	35	10	2.72	1.58	0.00	0.43	0.00	2.31	0.00	2.50
Local education agencies (LEA's)--level										
Elementary	276	100	4.45	2.91	0.41	0.41	0.39	0.77	0.00	3.61
Secondary	107	17	3.76	1.24	3.60	3.60	3.46	3.47	0.07	3.57
Unified	387	271	2.21	2.03	0.35	0.34	0.09	0.39	0.15	0.57
Public education agencies--region										
Northeastern.....	110	193	6.38	5.98	0.20	0.35	0.00	0.38	0.43	0.32
North Central.....	340	159	2.63	2.14	0.55	0.38	0.00	0.36	0.20	1.56
Southern.....	169	116	3.37	3.61	0.76	0.94	0.32	1.19	0.00	1.22
Western.....	245	59	2.11	2.11	0.74	0.77	0.66	0.90	0.11	1.22
Public education agencies-- fall 1982 enrollment										
Under 1,000.....	325	272	3.32	3.05	0.50	0.40	0.19	0.53	0.00	1.18
1,000-9,999.....	79	76	1.17	1.04	0.35	0.47	0.22	0.48	0.28	0.71
10,000 and over.....	9	6	0.97	0.79	0.24	0.49	0.40	0.48	0.01	0.31
Public education agencies-- metropolitan status										
MSA central city.....	3	0	0.00	0.12	0.05	0.04	0.03	0.04	0.01	0.04
MSA noncentral city.....	225	131	2.55	2.43	0.68	0.62	0.19	0.87	0.18	0.87
Nonmetropolitan areas.....	409	250	2.54	2.34	0.32	0.34	0.19	0.31	0.16	1.00

Table 168.—Standard errors for public education agencies and private schools offering special incentives to recruit or retain teachers, by type of incentive and by selected characteristics of institutions: 50 States and D. C., School Year 1983-84

Employing institution characteristics	Total educational institutions	Total offering incentives	Incentives of type named							
			Cash bonus	Percent offering Higher step on salary schedule	Free retraining	Award/recognition	Loan forgiveness	Released time	Sabbatical	Other
Public education agencies.....	316	282	0.58	1.65	0.60	0.39	0.27	0.76	0.49	1.34
Local education agencies.....	314	282	0.59	1.69	0.62	0.40	0.28	0.78	0.51	1.38
Intermediate education agencies	35	10	2.13	1.72	2.13	1.04	0.00	2.12	1.05	1.40
Local education agencies (LEA's)—level										
Elementary	276	100	0.88	4.08	2.06	0.00	0.39	0.81	0.65	0.27
Secondary	107	17	0.00	0.74	3.63	0.78	0.78	3.53	0.62	0.70
Unified	387	271	0.72	1.93	0.64	0.48	0.33	0.93	0.61	1.65
Public education agencies—region										
Northeastern.....	110	193	0.64	3.67	1.58	0.37	0.14	0.70	0.87	5.86
North Central.....	340	159	0.61	2.28	0.53	0.49	0.66	1.78	0.73	0.31
Southern.....	169	116	2.31	1.91	0.99	0.45	0.25	0.41	1.30	2.57
Western.....	245	59	0.66	3.34	2.34	1.75	0.35	1.14	1.20	1.12
Public education agencies—fall 1982 enrollment										
Under 1,000.....	325	272	0.95	3.01	1.03	0.64	0.44	1.32	0.83	2.48
1,000-9,999.....	79	76	0.68	0.77	0.57	0.45	0.32	0.67	0.49	0.46
10,000 and over.....	9	6	0.40	0.37	0.55	0.38	0.03	0.28	0.47	0.62
Public education agencies—metropolitan status										
MSA central city.....	3	0	0.05	0.04	0.06	0.02	0.03	0.01	0.04	0.05
MSA noncentral city.....	225	131	0.72	2.07	0.99	0.44	0.18	1.95	1.09	0.96
Nonmetropolitan areas.....	409	250	0.84	2.34	0.79	0.57	0.42	0.56	0.52	2.03
Private schools.....	738	590	1.00	2.16	1.53	0.82	0.60	0.68	0.43	0.84