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AUTHOR Hammer, Charles H.; Gerald, Elizabeth
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ABSTRACT

These tabulations present public and private school data that were collected on questionnaires from the 1987-88 Schools and Staffing Survey (SASS). The report is organized into 17 tables and technical notes. The tables include numbers, percentages, and standard errors by sector, selected characteristics, and states. The following topics are addressed: continuing and newly hired full-time equivalent (FTE) teachers; certified continuing and newly hired FTE teachers; FTE positions unfilled, vacant, and abolished or withdrawn; public school districts and private schools offering teacher incentives; public school FTE teaching positions approved, filled and unfilled; and teacher salary schedules averaged for public school districts by earned degree and experience. Technical notes elaborate on selection of public school districts, schools, and teachers; data collection; effects of missing school districts and schools; questionnaire response rates; item descriptions; source code response rates; comparisons of teacher counts from the SASS file; underestimation of the number of school districts; standard errors; definitions; and geographic regions used by the U.S. Bureau of the Census. The appendix contains the SASS questionnaire, Teacher Demand and Shortage Questionnaire for Public School Districts, and an explanation of differences between it and the questionnaire for private schools. (LL)

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E.D. TABS

August 1991

**Aspects of Teacher
Supply and Demand in
Public School Districts
and Private Schools:
1987-88**



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**U.S. Department of Education
Office of Educational Research and Improvement**

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Charles H. Hammer
Elizabeth Gerald
Elementary/Secondary Education Statistics Division

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**U.S. Department of Education
Office of Educational Research and Improvement**

NCES 91-133

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August 1991

Contact:
Charles H. Hammer
(202) 219-1330

Elizabeth Gerald
(202) 219-1334

Highlights

In the 1987-88 school year:

- Full-time-equivalent (FTE) teachers newly hired as regular employees by the school system for the 1987-88 school year (including teachers returning from unpaid leaves of absence of one year or more, but not substitute teachers) made up approximately 8 percent of the FTE teaching force in public school districts and about 17 percent in private schools; the remaining 92 percent and 83 percent composed the continuing teacher workforce.
- About 95 percent of all FTE teachers in public school districts and 80 percent in private schools held regular or standard state certification in their fields of assignment. (These percentages also included teachers who had completed all necessary course work and practice teaching and were eligible for full certification upon completion of a probationary period.) The percentage of newly hired FTE teachers holding certification was about 95 percent in public school districts and 79 percent in private schools.
- Both public school districts and private schools filled about 99 percent of their approved FTE teaching positions, leaving about 1 percent of public school district and 1.5 percent of private school positions unfilled (vacant, temporarily filled by a substitute teacher, or abolished or withdrawn). Private schools with enrollment of less than 150 students reported a larger percentage of FTE teaching positions unfilled (3.2 percent) than did private schools with enrollment of 300-499 (1.0 percent), 500-749 (0.7 percent), and 750 or more (1.3 percent). No differences in percentage of FTE teaching positions unfilled were found among public school districts in differing categories of size (enrollment).
- Teacher salary schedules in public school districts averaged about \$17,200 for teachers with a bachelor's degree and no experience, \$18,800 for teachers with a master's and no experience, and \$28,400 for teachers with a master's and 20 years of experience. The corresponding salary schedules in private schools were approximately \$12,400, \$13,600, and \$18,900. (The private school schedules do not reflect "income-in-kind", which private school teachers are more likely to receive than are public school teachers.)
- Approximately 8 percent of public school districts used pay incentives to recruit or retain teachers to teach in less desirable locations, or in subject fields where there were shortages of teaching personnel. About 13 percent of private schools used pay incentives to recruit or retain teachers to teach in subject fields where there were shortages.

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**Aspects of Teacher Supply and Demand
in Public School Districts and Private Schools:
1987-88**

Introduction

These tabulations on aspects of teacher supply and demand present public school district (LEA) and private school data on number of continuing and newly hired full-time equivalent (FTE) teachers; number of FTE teaching positions approved, filled and unfilled; and teacher salaries and incentives. The data were collected on the Teacher Demand and Shortage (TDS) Questionnaire for Public School Districts (LEAs) and the Teacher Demand and Shortage (TDS) Questionnaire for Private Schools. These are two of seven questionnaires comprising the 1987-88 Schools and Staffing Survey (SASS), a survey developed by the U.S. Department of Education's National Center for Education Statistics, and conducted by the U.S. Bureau of the Census. The tabulations provide national estimates for all data, and public school district state estimates for the number of continuing and newly hired FTE teachers; number of FTE teaching positions approved, filled and unfilled; and teacher salary schedules.

The SASS was a mail survey which collected public and private sector data on the nation's elementary and secondary teaching force, aspects of teacher supply and demand, teacher workplace conditions, characteristics of school administrators, and school policies and practices. The seven questionnaires of the SASS are as follows:

- The Teacher Demand and Shortage Questionnaire for Public School Districts (LEAs);
- The Teacher Demand and Shortage Questionnaire for Private Schools;
- The School Administrator Questionnaire;
- The Public School Questionnaire;
- The Private School Questionnaire;
- The Public School Teachers Questionnaire; and
- The Private School Teachers Questionnaire.

A degree of caution needs to be exercised in the interpretation and use of the data in these tables. The weighted response rate for private schools is somewhat low (66 percent), and there is some underestimation of counts on the school district file. Additionally, there are differences between counts reported here and counts reported on other SASS files or on the School Universe File of the Common Core of Data (CCD). A more complete discussion of data issues is presented in the Technical Notes section which follows presentation of the tables.

Table 1.—Number and percentage of continuing and newly hired full-time equivalent (FTE) teachers, by sector and by selected characteristics: United States, 1987-88

Characteristic	All FTE teachers		Continuing FTE teachers		Newly hired FTE teachers	
	Number	Percent	Number	Percent	Number	Percent
Public						
Total	2,316,015	100	2,138,982	92.4	177,033	7.6
LEA Size						
1 to 999	217,016	100	197,908	91.2	19,109	8.8
1,000 to 4,999	791,427	100	734,064	92.8	57,363	7.3
5,000 to 9,999	361,529	100	337,061	93.2	24,468	6.8
10,000 or more	946,042	100	869,949	92.0	76,093	8.0
Region						
Northeast	504,973	100	476,964	94.5	28,009	5.6
Midwest	583,141	100	546,528	93.7	36,614	6.3
South	824,531	100	748,558	90.8	75,974	9.2
West	403,369	100	366,933	91.0	36,437	9.0
Private						
Total	321,989	100	266,834	82.9	55,154	17.1
Private school size						
Less than 150	64,069	100	49,213	76.8	14,856	23.2
150 to 299	103,017	100	82,897	80.5	20,120	19.5
300 to 499	67,562	100	57,245	84.7	10,317	15.3
500 to 749	43,893	100	38,456	87.6	5,436	12.4
750 or more	43,448	100	39,024	89.8	4,425	10.2
Region						
Northeast	93,377	100	77,244	82.7	16,132	17.3
Midwest	86,492	100	72,380	83.7	14,113	16.3
South	90,635	100	75,480	83.3	15,155	16.7
West	51,485	100	41,731	81.1	9,754	19.0

NOTE: Details may not add to totals due to rounding. FTE counts do not include prekindergarten teachers.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88.

Table 2.—Number and percentage of certified continuing and newly hired full-time equivalent (FTE) teachers, by sector and by selected characteristics: United States, 1987-88

	All FTE teachers			Continuing FTE teachers			Newly hired FTE teachers		
	Total	Number certified	Percent certified	Total	Number certified	Percent certified	Total	Number certified	Percent certified
Public									
Total	2,316,015	2,208,560	95.4	2,138,982	2,040,773	95.4	177,033	167,786	94.8
LEA Size (Public)									
1 to 999	217,016	211,563	97.5	197,908	193,132	97.6	19,109	18,432	96.5
1,000 to 4,999	791,427	767,830	97.0	734,064	712,713	97.1	57,363	55,117	96.1
5,000 to 9,999	361,529	346,727	95.9	337,061	323,353	95.9	24,468	23,374	95.5
10,000 or more	946,042	882,440	93.3	869,949	811,575	93.3	76,093	70,864	93.1
Region									
Northeast	504,977	478,472	94.8	476,914	451,738	94.7	28,009	26,734	95.4
Midwest	583,141	572,648	98.2	546,528	536,477	98.2	36,614	36,171	98.8
South	824,531	776,408	94.2	748,558	704,907	94.2	75,974	71,501	94.1
West	403,369	381,033	94.5	366,933	347,652	94.7	36,437	33,381	91.6
Private									
Total	321,989	257,215	79.9	266,834	213,934	80.2	55,154	43,281	78.5
Private school size									
Less than 150	64,069	44,748	69.8	49,213	34,316	69.7	14,856	10,432	70.2
150 to 299	103,017	83,491	81.1	82,897	67,149	81.0	20,120	16,343	81.2
300 to 499	67,562	56,064	83.0	57,245	47,558	83.1	10,317	8,506	82.4
500 to 749	43,893	35,709	81.4	38,456	31,229	81.2	5,436	4,480	82.4
750 or more	43,448	37,203	85.6	39,024	33,683	86.3	4,425	3,520	79.5
Region									
Northeast	93,377	69,265	74.2	77,244	57,633	74.6	16,132	11,632	72.1
Midwest	86,492	76,348	88.3	72,380	64,163	88.7	14,113	12,185	86.3
South	90,635	71,847	79.3	75,480	59,956	79.4	15,155	11,891	78.5
West	51,485	39,754	77.2	41,731	32,181	77.1	9,754	7,573	77.6

NOTE: Details may not add to totals due to rounding. FTE counts do not include prekindergarten teachers. FTE counts of certified teachers include teachers who have completed all necessary course work and practice teaching and are eligible for full certification upon completion of a probationary period.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88.

Table 3.—Number and percentage of full-time equivalent (FTE) teaching positions approved, filled, and unfilled, by sector and selected characteristics: United States, 1987-88

Characteristic	Total FTE positions approved		Total FTE positions filled		Total FTE positions unfilled	
	Number	Percent	Number	Percent	Number	Percent
Public						
Total	2,338,993	100	2,316,015	99.0	22,978	1.0
LEA Size						
1 to 999	220,230	100	217,016	98.5	3,214	1.5
1,000 to 4,999	798,970	100	791,427	99.1	7,543	0.9
5,000 to 9,999	364,340	100	361,529	99.2	2,811	0.8
10,000 or more	955,453	100	946,042	99.0	9,410	1.0
Region						
Northeast	510,439	100	504,973	98.9	5,466	1.1
Midwest	588,622	100	583,141	99.1	5,481	0.9
South	832,656	100	824,531	99.0	8,124	1.0
West	407,276	100	403,362	99.0	3,907	1.0
Private						
Total	326,734	100	321,989	98.6	4,745	1.5
Private school size						
Less than 150	66,177	100	64,069	96.8	2,108	3.2
150 to 299	104,089	100	103,017	99.0	1,072	1.0
300 to 499	68,221	100	67,562	99.0	659	1.0
500 to 749	44,220	100	43,893	99.3	328	0.7
750 or more	44,027	100	43,448	98.7	579	1.3
Region						
Northeast	94,793	100	93,377	98.5	1,416	1.5
Midwest	87,838	100	86,492	98.5	1,345	1.5
South	91,959	100	90,635	98.6	1,324	1.4
West	52,145	100	51,485	98.7	660	1.3

NOTE: Details may not add to totals due to rounding. FTE counts do not include prekindergarten teachers. FTE counts of positions unfilled include positions vacant, temporarily filled by a substitute teacher, abolished, or withdrawn.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88.

Table 4.—Number and percentage of full-time equivalent (FTE) teaching positions unfilled, vacant, and abolished or withdrawn, by sector and by selected characteristics: United States, 1987-88

Characteristic	Total FTE positions unfilled		Total unfilled that are vacant		Total unfilled that are abolished or withdrawn	
	Number	Percent	Number	Percent	Number	Percent
Public						
Total	22,978	100	15,989	69.6	6,989	30.4
LEA Size						
1 to 999	3,214	100	1,536	47.8	1,678	52.2
1,000 to 4,999	7,543	100	5,945	78.8	1,597	21.2
5,000 to 9,999	2,811	100	1,392	49.5	1,419	50.5
10,000 or more	9,410	100	7,116	75.6	2,294	24.4
Region						
Northeast	5,466	100	5,013	91.7	453	8.3
Midwest	5,481	100	3,893	71.0	1,587	29.0
South	8,124	100	4,861	59.8	3,263	40.2
West	3,907	100	2,221	56.9	1,685	43.1
Private						
Total	4,745	100	2,157	45.5	2,588	54.5
Private school size						
Less than 150	2,108	100	962	45.6	1,146	54.4
150 to 299	1,072	100	498	46.4	574	53.6
300 to 499	659	100	142	21.6	517	78.5
500 to 749	328	100	220	67.2	108	32.8
750 or more	579	100	335	58.0	243	42.0
Region						
Northeast	1,416	100	807	57.0	609	43.0
Midwest	1,345	100	555	41.3	790	58.8
South	1,324	100	494	37.3	830	62.7
West	660	100	301	45.6	359	54.4

NOTE: Details may not add to totals due to rounding. FTE counts do not include prekindergarten teachers. FTE counts of positions vacant include positions temporarily filled by a substitute teacher.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88.

Table 5. —Teacher salary schedules averaged for public school districts and private schools, by earned degree and experience, and by sector and selected characteristics: United States 1987–88

Characteristic	Degree and experience		
	Bachelor's and no experience	Master's and no experience	Master's and 20 years experience
Public			
Total	\$17,180	\$18,806	\$28,416
LEA Size (Public)			
1 to 999	16,443	18,033	26,276
1,000 to 4,999	17,806	19,430	30,393
5,000 to 9,999	18,445	20,395	31,861
10,000 or more	18,875	20,517	32,235
Region			
Northeast	18,169	19,693	32,066
Midwest	16,470	18,138	27,303
South	16,678	17,815	25,489
West	18,217	20,478	30,388
Private			
Total	\$12,389	\$13,573	\$18,854
Private school size			
Less than 150	11,762	12,903	16,916
150 to 299	12,436	13,576	19,298
300 to 499	13,453	14,824	21,396
500 to 749	13,525	14,770	22,626
750 or more	14,811	16,231	25,824
Region			
Northeast	11,756	12,811	18,495
Midwest	12,172	13,290	19,035
South	12,174	13,315	17,563
West	13,980	15,525	20,965

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987–88.

Table 6.--Number and percentage of public school districts and private schools offering teacher incentives: United States, 1987-88

Purpose and type of incentive offered	Public school districts		Private schools	
	Number	Percent	Number	Percent
Total school districts/schools	15,244	100.0	26,898	100.0
Total offering incentive	1,136	7.5	3,459	12.9
Attracting teachers to less desirable locations				
Cash bonus	165	1.1	++	++
Different step on salary schedule	1,008	6.6	++	++
Other salary increase	812	5.3	++	++
None of the above	821	5.4	++	++
Attracting teachers to fields of shortage				
Cash bonus	165	1.1	644	2.4
Different step on salary schedule	426	2.8	1,951	7.3
Other salary increase	269	1.8	1,349	5.0
None of the above	1,255	8.2	0	0.0
Fields of recruitment incentives:				
Special education	335	2.2	411	1.5
Mathematics	405	2.7	1,136	4.2
Computer Science	190	1.3	617	2.3
Physical Sciences	259	1.7	945	3.5
Biological Sciences	203	1.3	768	2.9
Bilingual Education	128	0.8	192	0.7
Foreign Language	154	1.0	536	2.0
Other	297	2.0	2,230	8.3

++ Data not collected for private schools.

NOTE: Details may not add to totals due to multiple responses or rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88.

Table 7.—Number and percentage of continuing and newly hired public school full-time equivalent (FTE) teachers, by state: United States, 1987-88

State	All FTE teachers		Continuing FTE teachers		Newly hired FTE teacher	
	Number	Percent	Number	Percent	Number	Percent
United States	2,316,015	100	2,138,982	92.4	177,033	7.6
Alabama	36,983	100	34,096	92.2	2,887	7.8
Alaska	6,088	100	5,733	94.2	355	5.8
Arizona	27,596	100	24,329	88.2	3,266	11.8
Arkansas	29,543	100	25,902	87.7	3,642	12.3
California	203,036	100	185,906	91.6	17,130	8.4
Colorado	29,857	100	27,162	91.0	2,695	9.0
Connecticut	33,935	100	31,762	93.6	2,173	6.4
Delaware	6,579	100	6,224	94.6	355	5.4
District of Columbia	5,099	100	4,790	93.9	309	6.1
Florida	91,036	100	83,350	91.6	7,686	8.4
Georgia	63,730	100	55,863	87.7	7,867	12.3
Hawaii	7,750	100	6,823	88.0	927	12.0
Idaho	10,186	100	9,175	90.1	1,011	9.9
Illinois	108,747	100	102,728	94.5	6,019	5.5
Indiana	55,490	100	51,900	93.5	3,590	6.5
Iowa	33,233	100	30,998	93.3	2,235	6.7
Kansas	26,722	100	24,307	91.0	2,414	9.0
Kentucky	38,551	100	35,901	93.1	2,650	6.9
Louisiana	40,962	100	37,888	92.5	3,075	7.5
Maine	15,814	100	14,431	91.3	1,383	8.8
Maryland	32,626	100	30,002	92.0	2,623	8.0
Massachusetts	61,718	100	57,652	93.4	4,066	6.6
Michigan	81,963	100	78,381	95.6	3,582	4.4
Minnesota	42,414	100	39,327	92.7	3,087	7.3
Mississippi	26,772	100	24,455	91.3	2,318	8.7
Missouri	51,708	100	47,584	92.0	4,124	8.0
Montana	12,225	100	11,279	92.3	947	7.7
Nebraska	16,850	100	15,438	91.6	1,412	8.4
Nevada	7,732	100	6,709	86.8	1,023	13.2
New Hampshire	11,401	100	9,951	87.3	1,449	12.7
New Jersey	76,689	100	72,195	94.1	4,494	5.9
New Mexico	13,847	100	12,076	87.2	1,771	12.8
New York	186,059	100	175,914	94.6	10,145	5.5
North Carolina	62,583	100	56,904	90.9	5,679	9.1
North Dakota	8,052	100	7,605	94.5	447	5.6
Ohio	105,623	100	99,213	93.9	6,410	6.1
Oklahoma	38,449	100	36,134	94.0	2,314	6.0
Oregon	24,526	100	22,527	91.9	1,999	8.2
Pennsylvania	104,117	100	100,735	96.8	3,382	3.3
Rhode Island	9,012	100	8,643	95.9	369	4.1
South Carolina	34,255	100	30,959	90.4	3,296	9.6
South Dakota	8,649	100	7,910	91.5	739	8.5
Tennessee	45,722	100	42,856	93.7	2,867	6.3
Texas	183,932	100	161,998	88.1	21,934	11.9
Utah	15,751	100	13,806	87.7	1,945	12.4
Vermont	6,227	100	5,679	91.2	548	8.8
Virginia	65,076	100	59,810	91.9	5,266	8.1
Washington	38,031	100	34,965	91.9	3,066	8.1
West Virginia	22,632	100	21,426	94.7	1,206	5.3
Wisconsin	43,692	100	41,136	94.2	2,556	5.9
Wyoming	6,745	100	6,443	95.5	303	4.5

NOTE: Numbers and percentages for Delaware, the District of Columbia, Hawaii, Nevada, and West Virginia are universe figures because all school districts in these jurisdictions were included in the sample. Estimates for all other states except Maryland are based on samples of at least 30 cases. The number of sample cases for Maryland is 24. See p. 22 for discussion of effects of missing school districts and schools for Nebraska and discussion of low questionnaire response rate for Connecticut. Details may not add to totals due to rounding. FTE counts do not include prekindergarten teachers.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88.

Table 8.—Number and percentage of certified continuing and newly hired public school full-time equivalent (FTE) teachers by state: United States, 1987-88.

State	All FTE teachers			Continuing FTE teachers			Newly hired FTE teachers		
	Total	Number certified	Percent certified	Total	Number certified	Percent certified	Total	Number certified	Percent certified
United States	2,316,015	2,208,560	95.4	2,138,982	2,040,773	95.4	177,033	167,786	94.8
Alabama	36,983	34,184	92.4	34,096	31,573	92.6	2,887	2,612	90.5
Alaska	6,088	6,059	99.5	5,733	5,710	99.6	355	350	98.6
Arizona	27,596	27,461	99.5	24,329	24,209	99.5	3,266	3,251	99.5
Arkansas	29,543	28,576	96.7	25,902	25,056	96.7	3,642	3,520	96.7
California	203,036	189,530	93.4	185,906	174,752	94.0	17,130	14,778	86.3
Colorado	29,857	29,113	97.5	27,162	26,445	97.4	2,695	2,668	99.0
Connecticut	33,935	32,605	96.1	31,762	30,610	96.4	2,173	1,995	91.8
Delaware	6,579	5,783	87.9	6,224	5,441	87.4	355	342	96.6
Dist. of Columbia	5,099	4,099	80.4	4,790	3,790	79.1	309	309	100.0
Florida	91,036	81,620	89.7	83,350	74,362	89.2	7,686	7,259	94.4
Georgia	63,730	60,900	95.6	55,863	53,205	95.2	7,867	7,695	97.8
Hawaii	7,750	7,750	100.0	6,823	6,823	100.0	927	927	100.0
Idaho	10,186	10,109	99.3	9,175	9,102	99.2	1,011	1,007	99.6
Illinois	108,747	107,843	99.2	102,728	101,881	99.2	6,019	5,963	99.1
Indiana	55,490	51,900	93.5	51,900	48,397	93.3	3,590	3,503	97.6
Iowa	33,233	32,870	98.9	30,998	30,697	99.0	2,235	2,173	97.2
Kansas	26,722	26,244	98.2	24,307	23,844	98.1	2,414	2,400	99.4
Kentucky	38,551	38,290	99.3	35,901	35,669	99.4	2,650	2,621	98.9
Louisiana	40,962	33,968	82.9	37,888	31,360	82.8	3,075	2,608	84.8
Maine	15,814	15,542	98.3	14,431	14,245	98.7	1,383	1,298	93.8
Maryland	32,626	31,796	97.5	30,002	29,310	97.7	2,623	2,487	94.8
Massachusetts	61,718	59,350	96.2	57,652	55,527	96.3	4,066	3,823	94.0
Michigan	81,963	81,155	99.0	78,381	77,599	99.0	3,582	3,556	99.3
Minnesota	42,414	41,845	98.7	39,327	38,780	98.6	3,087	3,064	99.3
Mississippi	26,772	25,905	96.8	24,455	23,618	96.6	2,318	2,287	98.7
Missouri	51,708	51,368	99.3	47,584	47,299	99.4	4,124	4,069	98.7
Montana	12,225	11,957	97.8	11,279	11,022	97.7	947	936	98.9
Nebraska	16,850	16,678	99.0	15,438	15,271	98.9	1,412	1,407	99.7
Nevada	7,732	7,451	96.4	6,709	6,428	95.8	1,023	1,023	100.0
New Hampshire	11,401	11,166	97.9	9,951	9,837	98.9	1,449	1,330	91.7
New Jersey	76,689	75,313	98.2	72,195	70,908	98.2	4,494	4,405	98.0
New Mexico	13,847	13,095	94.6	12,076	11,617	96.2	1,771	1,478	83.5
New York	186,059	181,380	97.5	175,914	171,691	97.6	10,145	9,689	95.5
North Carolina	62,583	60,916	97.3	56,904	55,290	97.2	5,679	5,626	99.1
North Dakota	8,052	7,975	99.0	7,605	7,528	99.0	447	447	100.0
Ohio	105,623	102,836	97.4	99,213	96,487	97.3	6,410	6,349	99.0
Oklahoma	38,449	37,955	98.7	36,134	35,711	98.8	2,314	2,244	97.0
Oregon	24,526	23,820	97.1	22,527	21,861	97.0	1,999	1,959	98.0
Pennsylvania	104,117	88,139	84.7	100,735	84,846	84.2	3,382	3,293	97.4
Rhode Island	9,012	8,912	98.9	8,643	8,550	98.9	369	362	98.2
South Carolina	34,255	33,457	97.7	30,959	30,266	97.8	3,296	3,192	96.8
South Dakota	8,649	8,566	99.1	7,910	7,830	99.0	739	736	99.7
Tennessee	45,722	42,454	92.9	42,856	39,694	92.6	2,867	2,760	96.3
Texas	183,932	177,405	96.5	161,998	157,343	97.1	21,934	20,062	91.5
Utah	15,751	12,717	80.7	13,806	10,921	79.1	1,945	1,797	92.4
Vermont	6,227	6,063	97.4	5,679	5,524	97.3	548	540	98.5
Virginia	65,076	58,215	89.5	59,810	53,473	89.4	5,266	4,742	90.1
Washington	38,031	35,299	92.8	34,965	32,395	92.7	3,066	2,904	94.7
West Virginia	22,632	20,883	92.3	21,426	19,747	92.2	1,206	1,136	94.2
Wisconsin	43,692	43,368	99.3	41,136	40,863	99.3	2,556	2,505	98.0
Wyoming	6,745	6,671	98.9	6,443	6,368	98.8	303	303	100.0

NOTE: Numbers and percentages for Delaware, the District of Columbia, Hawaii, Nevada, and West Virginia are universe figures because all school districts in these jurisdictions were included in the sample. Estimates for all other states except Maryland are based on samples of at least 30 cases. The number of sample cases for Maryland is 24. See p. 22 for discussion of effects of missing school districts and schools for Nebraska and discussion of low questionnaire response rate for Connecticut. Details may not add to totals due to rounding. FTE counts do not include prekindergarten teachers. FTE counts of certified teachers include teachers who have completed all necessary course work and practice teaching and are eligible for full certification upon completion of a probationary period.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey 1987-88.

Table 9.—Number and percentage of public school full-time equivalent (FTE) teaching positions approved, filled, and unfilled, by state: United States, 1987-88

State	Total FTE positions approved		Total FTE positions filled		Total FTE positions unfilled	
	Number	Percent	Number	Percent	Number	Percent
United States	2,338,993	100	2,316,015	99.0	22,978	1.0
Alabama	37,506	100	36,983	98.6	523	1.4
Alaska	6,194	100	6,088	98.3	107	1.7
Arizona	28,248	100	27,596	97.7	652	2.3
Arkansas	29,922	100	29,543	98.7	379	1.3
California	204,354	100	203,036	99.4	1,318	0.6
Colorado	30,268	100	29,857	98.6	411	1.4
Connecticut	34,600	100	33,935	98.1	664	1.9
Delaware	6,584	100	6,579	99.9	5	0.1
District of Columbia	5,150	100	5,099	99.0	51	1.0
Florida	92,159	100	91,036	98.8	1,123	1.2
Georgia	64,091	100	63,730	99.4	361	0.6
Hawaii	7,750	100	7,750	100.0	0	0.0
Idaho	10,260	100	10,186	99.3	74	0.7
Illinois	109,187	100	108,747	99.6	440	0.4
Indiana	57,625	100	55,490	96.3	2,136	3.7
Iowa	33,456	100	33,233	99.3	223	0.7
Kansas	26,837	100	26,722	99.6	116	0.4
Kentucky	38,878	100	38,551	99.2	327	0.8
Louisiana	41,258	100	40,962	99.3	296	0.7
Maine	15,943	100	15,814	99.2	130	0.8
Maryland	32,647	100	32,626	99.9	22	0.1
Massachusetts	62,046	100	61,718	99.5	328	0.5
Michigan	82,245	100	81,963	99.7	283	0.3
Minnesota	42,628	100	42,414	99.5	214	0.5
Mississippi	27,019	100	26,772	99.1	247	0.9
Missouri	51,992	100	51,708	99.5	284	0.6
Montana	12,394	100	12,226	98.6	168	1.4
Nebraska	16,893	100	16,850	99.7	44	0.3
Nevada	7,739	100	7,732	99.9	7	0.1
New Hampshire	11,746	100	11,401	97.1	346	2.9
New Jersey	78,160	100	76,689	98.1	1,471	1.9
New Mexico	13,896	100	13,847	99.7	49	0.4
New York	187,083	100	186,059	99.5	1,024	0.6
North Carolina	63,552	100	62,583	98.5	969	1.5
North Dakota	8,187	100	8,052	98.3	136	1.7
Ohio	106,973	100	105,623	98.7	1,350	1.3
Oklahoma	39,294	100	38,449	97.9	846	2.2
Oregon	24,805	100	24,526	98.9	279	1.1
Pennsylvania	105,521	100	104,117	98.7	1,404	1.3
Rhode Island	9,063	100	9,012	99.4	50	0.6
South Carolina	34,481	100	34,255	99.3	226	0.7
South Dakota	8,670	100	8,649	99.8	22	0.3
Tennessee	45,824	100	45,722	99.8	102	0.2
Texas	185,435	100	183,932	99.2	1,503	0.8
Utah	16,209	100	15,751	97.2	458	2.8
Vermont	6,277	100	6,227	99.2	50	0.8
Virginia	65,681	100	65,076	99.1	605	0.9
Washington	38,351	100	38,031	99.2	321	0.8
West Virginia	23,173	100	22,632	97.7	541	2.3
Wisconsin	43,926	100	43,692	99.5	234	0.5
Wyoming	6,808	100	6,745	99.1	63	0.9

NOTES: Numbers and percentages for Delaware, the District of Columbia, Hawaii, Nevada, and West Virginia are universe figures because all school districts in these jurisdictions were included in the sample. Estimates for all other states except Maryland are based on samples of at least 30 cases. The number of sample cases for Maryland is 24. See p.22 for discussion of effects of missing school districts and schools for Nebraska and discussion of low questionnaire response rate for Connecticut. Details may not add to totals due to rounding. FTE counts do not include prekindergarten teachers. FTE counts of positions unfilled include positions vacant, temporarily filled by a substitute teacher, abolished, or withdrawn.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88.

Table 10.--Number and percentage of public school full-time equivalent (FTE) teaching positions unfilled, vacant, and abolished or withdrawn, by state: United States, 1987-88

State	Total FTE positions unfilled		Total unfilled that are vacant		Total unfilled that are abolished or withdrawn	
	Number	Percent	Number	Percent	Number	Percent
United States	22,978	100	15,989	69.6	6,989	30.4
Alabama	523	100	84	16.0	439	84.0
Alaska	107	100	15	14.1	92	85.9
Arizona	652	100	180	27.6	472	72.4
Arkansas	379	100	307	81.1	72	18.9
California	1,318	100	1,164	88.4	154	11.6
Colorado	411	100	278	67.5	134	32.5
Connecticut	664	100	664	100.0	0	0.0
Delaware	5	100	3	66.7	2	33.3
District of Columbia	51	100	51	100.0	0	0.0
Florida	1,123	100	199	17.7	923	82.3
Georgia	361	100	345	95.5	16	4.5
Hawaii	0	0.0	0	0.0	0	0.0
Idaho	74	100	10	13.1	64	86.9
Illinois	440	100	253	57.5	187	42.5
Indiana	2,136	100	2,074	97.1	61	2.9
Iowa	223	100	47	21.2	176	78.8
Kansas	116	100	44	37.8	72	62.3
Kentucky	327	100	306	93.6	21	6.4
Louisiana	296	100	255	86.4	40	13.6
Maine	130	100	112	86.4	18	13.6
Maryland	22	100	20	94.1	1	5.9
Massachusetts	328	100	281	85.8	47	14.2
Michigan	283	100	201	71.2	81	28.8
Minnesota	214	100	167	77.9	47	22.1
Mississippi	247	100	221	89.5	26	10.5
Missouri	284	100	261	92.1	22	7.9
Montana	168	100	50	29.8	119	70.5
Nebraska	44	100	13	29.5	31	71.1
Nevada	7	100	7	100.0	0	0.0
New Hampshire	346	100	340	98.5	5	1.5
New Jersey	1,471	100	1,406	95.6	65	4.4
New Mexico	49	100	39	79.6	10	20.4
New York	1,024	100	890	86.9	134	13.1
North Carolina	969	100	863	89.0	106	11.0
North Dakota	136	100	95	69.8	41	30.2
Ohio	1,350	100	598	44.3	752	55.7
Oklahoma	846	100	699	82.6	147	17.4
Oregon	279	100	183	65.4	96	34.6
Pennsylvania	1,404	100	1,233	87.8	171	12.2
Rhode Island	50	100	38	74.8	13	25.2
South Carolina	226	100	173	76.6	53	23.5
South Dakota	22	100	1	4.8	21	95.2
Tennessee	102	100	71	69.1	31	30.9
Texas	1,503	100	580	38.6	922	61.4
Utah	458	100	3	0.8	455	99.2
Vermont	50	100	49	98.0	1	2.0
Virginia	605	100	288	47.6	317	52.4
Washington	321	100	287	89.6	33	10.4
West Virginia	541	100	396	73.2	145	26.8
Wisconsin	234	100	140	59.6	95	40.4
Wyoming	63	100	5	8.7	57	91.3

NOTE: Numbers and percentages for Delaware, the District of Columbia, Hawaii, Nevada, and West Virginia are universe figures because all school districts in these jurisdictions were included in the sample. Estimates for all other states except Maryland are based on samples of at least 30 cases. The number of sample cases for Maryland is 24. See p. 22 for discussion of effects of missing school districts and schools for Nebraska and discussion of low questionnaire response rate for Connecticut. Details may not add to totals due to rounding. FTE counts do not include prekindergarten teachers. FTE counts of positions vacant include positions temporarily filled by a substitute teacher.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88.

Table 11. --Teacher salary schedules averaged for public school districts by earned degree and experience, and by state: United States, 1987-88

State	Degree and experience		
	Bachelor's and no experience	Master's and no experience	Master's and 20 years experience
United States			
Total	\$17,180	\$18,806	\$28,416
Alabama	18,061	20,630	23,955
Alaska	28,448	32,132	46,585
Arizona	18,368	20,644	26,244
Arkansas	15,954	16,830	20,729
California	20,704	22,849	34,165
Colorado	17,001	18,919	27,169
Connecticut	20,757	22,195	34,209
Delaware	18,226	20,737	31,989
District of Columbia	19,116	21,029	37,288
Florida	18,679	20,111	28,539
Georgia	18,219	21,021	28,065
Hawaii	17,607	18,707	35,740
Idaho	14,856	16,537	24,461
Illinois	16,364	17,963	28,097
Indiana	17,154	18,286	29,867
Iowa	16,259	17,262	25,010
Kansas	17,777	19,137	25,990
Kentucky	16,494	18,755	25,675
Louisiana	14,941	15,278	20,762
Maine	15,692	16,918	26,558
Maryland	19,443	20,896	31,966
Massachusetts	17,764	19,133	29,327
Michigan	18,085	19,588	32,494
Minnesota	18,545	20,560	30,011
Mississippi	16,384	17,274	22,135
Missouri	15,897	17,061	22,033
Montana	14,944	17,584	26,835
Nebraska	13,987	16,627	22,324
Nevada	18,552	21,261	32,852
New Hampshire	16,342	17,864	27,258
New Jersey	19,915	21,406	35,368
New Mexico	17,366	19,254	26,361
New York	18,747	20,766	35,154
North Carolina	17,612	19,307	29,614
North Dakota	14,487	16,420	22,576
Ohio	16,533	18,288	30,716
Oklahoma	15,825	16,930	22,622
Oregon	16,386	18,025	26,829
Pennsylvania	17,859	18,889	31,074
Rhode Island	17,623	18,894	34,077
South Carolina	17,799	20,253	29,589
South Dakota	13,931	15,063	21,661
Tennessee	16,354	18,013	23,511
Texas	16,632	16,923	27,754
Utah	15,677	17,573	27,754
Vermont	15,031	16,891	26,969
Virginia	18,464	19,835	28,912
Washington	16,978	20,052	31,692
West Virginia	15,251	17,018	24,460
Wisconsin	17,528	19,701	30,123
Wyoming	18,959	21,488	30,973

NOTE: Salary schedules for Delaware, the District of Columbia, Hawaii, Nevada, and West Virginia are universe figures because all school districts in these jurisdictions were included in the sample. Estimates for all other states except Maryland are based on samples of at least 30 cases. The number of cases for Maryland is 24. See p. 22 for discussion of effects of missing school districts and schools for Nebraska and discussion of low questionnaire response rate for Connecticut. Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88.

Table 12.—Standard errors for number and percentage of continuing and newly hired full-time equivalent (FTE) teachers, by sector and by selected characteristics United States, 1987-88 (table 1)

Characteristic	All FTE teachers	Continuing FTE teachers		Newly hired FTE teachers	
		Number	Percent	Number	Percent
Public					
Total	10,318	9,679	0.04	1,224	0.04
LEA Size					
1 to 999	4,670	4,208	0.28	777	0.28
1,000 to 4,999	10,408	9,620	0.11	1,200	0.11
5,000 to 9,999	8,621	8,113	0.14	712	0.14
10,000 or more	5,249	4,707	0.04	654	0.04
Region					
Northeast	5,681	5,304	0.10	651	0.10
Midwest	7,671	7,172	0.10	757	0.10
South	4,841	4,400	0.09	863	0.09
West	4,550	4,134	0.11	639	0.11
Private					
Total	8,767	7,995	0.45	1,589	0.45
Private school size					
Less than 150	3,561	2,590	0.96	1,183	0.96
150 to 299	4,621	3,886	0.68	1,047	0.68
300 to 499	4,258	3,672	0.89	876	0.89
500 to 749	3,605	3,203	0.74	519	0.74
750 or more	5,503	4,983	0.52	569	0.52
Region					
Northeast	4,428	3,543	0.84	1,228	0.84
Midwest	3,065	2,634	0.59	697	0.59
South	5,122	4,582	0.90	979	0.90
West	2,401	2,085	1.00	639	1.00

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey 1987-88.

Table 13.—Standard errors for number of full-time equivalent (FTE) teaching teaching positions approved, filled and unfilled, by sector and selected characteristics: United States, 1987-88 (table 3)

Characteristic	Total FTE positions approved	Total FTE positions filled		Total FTE positions unfilled	
		Number	Percent	Number	Percent
Public					
Total	10,153	10,318	0.06	1,495	0.06
LEA Size					
1 to 999	4,724	4,670	0.24	531	0.24
1,000 to 4,999	10,438	10,408	0.16	1,306	16.00
5,000 to 9,999	8,642	8,621	0.09	323	0.09
10,000 or more	5,276	5,249	0.01	66	0.01
Region					
Northeast	5,879	5,681	0.22	1,144	0.22
Midwest	7,649	7,671	0.09	495	0.09
South	4,842	4,841	0.10	856	0.10
West	4,595	4,550	0.04	154	0.04
Private					
Total	8,865	8,767	0.14	463	0.14
Private school size					
Less than 150	3,706	3,561	0.44	334	0.44
150 to 299	4,594	4,621	0.20	171	0.20
300 to 499	4,301	4,258	0.21	150	0.21
500 to 749	3,613	3,605	0.26	114	0.26
750 or more	5,570	5,503	0.47	214	0.47
Region					
Northeast	4,632	4,428	0.34	354	0.34
Midwest	3,060	3,065	0.25	208	0.25
South	5,215	5,122	0.30	293	0.30
West	2,380	2,401	0.30	149	0.30

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88.

Table 14. —Standard errors for teacher salary schedules averaged for public school districts and private schools, by earned degree and experience, and by sector and selected characteristics: United States 1987-88 (table 5)

Characteristic	Degree and experience		
	Bachelor's and no experience	Master's and no experience	Master's and 20 years experience
Public			
Total	\$48.8	\$48.3	\$113.1
LEA Size (Public)			
1 to 999	39.4	86.7	195.9
1,000 to 4,999	34.1	40.8	93.1
5,000 to 9,999	55.9	85.9	171.3
10,000 or more	28.7	31.7	67.8
Region			
Northeast	76.4	95.1	215.0
Midwest	78.4	80.9	173.3
South	42.5	47.8	97.5
West	158.8	156.3	350.9
Private			
Total	\$151.9	\$183.1	\$253.0
Private school size			
Less than 150	271.6	306.9	437.4
150 to 299	153.2	191.8	301.4
300 to 499	167.9	255.3	265.1
500 to 749	155.4	203.6	479.0
750 or more	298.0	217.2	457.2
Region			
Northeast	441.8	502.1	745.9
Midwest	212.0	237.8	409.5
South	376.3	420.2	595.7
West	210.0	277.4	444.1

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88.

Table 15. — Standard errors for number and percentage of continuing and newly hired public school full-time equivalent (FTE) teachers, by state: United States, 1987-88. (table 7)

State	All FTE teachers	Continuing FTE teachers		Newly hired FTE teachers	
		Number	Percent	Number	Percent
United States	10,317.6	9,679.4	0.04	1,223.5	0.04
Alabama	1,121.2	1,037.1	0.19	111.4	0.19
Alaska	61.3	56.6	0.19	12.7	0.19
Arizona	1,275.6	1,113.2	0.73	274.6	0.73
Arkansas	1,008.5	939.9	0.72	229.2	0.72
California	3,073.3	2,819.0	0.18	455.3	0.18
Colorado	1,078.3	944.6	0.32	165.0	0.32
Connecticut	1,591.2	1,486.0	0.30	147.3	0.30
Delaware	0.0	0.0	0.00	0.0	0.00
District of Columbia	0.0	0.0	0.00	0.0	0.00
Florida	1,254.2	1,137.1	0.10	152.5	0.10
Georgia	2,030.3	1,828.4	0.31	284.6	0.31
Hawaii	0.0	0.0	0.00	0.0	0.00
Idaho	257.0	248.0	0.45	46.2	0.45
Illinois	1,840.4	1,733.4	0.21	261.3	0.21
Indiana	1,672.8	1,578.6	0.19	142.7	0.19
Iowa	1,364.9	1,227.1	0.38	183.0	0.38
Kansas	798.0	720.6	0.34	120.7	0.34
Kentucky	1,398.3	1,297.5	0.31	161.5	0.31
Louisiana	838.2	771.6	0.15	91.8	0.15
Maine	806.1	746.8	0.68	126.8	0.68
Maryland	43.1	29.1	0.37	15.2	0.37
Massachusetts	2,419.2	2,246.8	0.30	253.1	0.30
Michigan	2,105.5	1,954.5	0.23	233.1	0.23
Minnesota	1,481.1	1,364.2	0.51	246.5	0.51
Mississippi	1,002.4	931.7	0.35	120.0	0.35
Missouri	1,397.8	1,286.3	0.32	203.9	0.32
Montana	590.2	518.0	0.92	133.9	0.92
Nebraska	766.0	763.5	0.71	104.9	0.71
Nevada	0.0	0.0	0.00	0.0	0.00
New Hampshire	450.9	368.3	0.99	144.1	0.99
New Jersey	3,265.1	3,012.0	0.35	372.4	0.35
New Mexico	482.0	433.0	0.28	62.3	0.28
New York	3,652.5	3,489.6	0.23	460.8	0.23
North Carolina	1,284.1	1,144.6	0.18	183.0	0.18
North Dakota	302.7	299.6	0.47	37.0	0.47
Ohio	4,000.6	3,738.1	0.17	321.1	0.17
Oklahoma	2,021.3	1,967.6	0.42	160.1	0.42
Oregon	809.0	783.4	0.43	105.1	0.43
Pennsylvania	2,595.5	2,465.4	0.19	235.8	0.19
Rhode Island	185.4	179.3	0.15	15.3	0.15
South Carolina	1,226.9	1,107.7	0.25	149.5	0.25
South Dakota	325.2	299.2	0.53	53.4	0.53
Tennessee	1,396.0	1,270.9	0.34	199.1	0.34
Texas	3,100.9	2,765.3	0.26	614.3	0.26
Utah	272.1	229.5	0.19	52.5	0.19
Vermont	311.8	307.4	0.69	37.4	0.69
Virginia	1,315.6	1,186.9	0.18	173.5	0.18
Washington	1,803.3	1,660.1	0.30	189.0	0.30
West Virginia	0.0	0.0	0.00	0.0	0.00
Wisconsin	1,554.8	1,476.3	0.25	134.2	0.25
Wyoming	208.4	200.8	0.30	22.2	0.30

NOTE: Standard errors for Delaware, the District of Columbia, Hawaii, Nevada, and West Virginia are "0.0" for numbers and "0.00" for percentages because all school districts in these jurisdictions were included in the sample
 SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88.

Table 16. —Standard errors for number and percentage of public school full-time equivalent (FTE) teaching positions approved, filled, and unfilled, by state: United States, 1987-88 (table 9)

State	Total FTE positions approved	Total FTE positions filled		Total FTE positions unfilled	
		Number	Percent	Number	Percent
United States	10,152.9	10,317.6	0.06	1,495.0	0.06
Alabama	1,234.7	1,121.2	0.71	271.7	0.71
Alaska	61.3	61.3	0.02	**	0.02
Arizona	1,296.6	1,275.6	0.26	78.9	0.26
Arkansas	1,003.8	1,008.5	0.67	200.9	0.67
California	3,107.5	3,073.3	0.04	87.4	0.04
Colorado	1,075.3	1,078.3	0.10	24.5	0.10
Connecticut	1,692.0	1,591.2	1.54	529.2	1.54
Delaware	0.0	0.0	0.00	0.0	0.00
District of Columbia	0.0	0.0	0.00	0.0	0.00
Florida	1,257.6	1,254.2	0.02	11.9	0.02
Georgia	2,032.0	2,030.3	0.04	23.6	0.04
Hawaii	0.0	0.0	0.00	0.0	0.00
Idaho	256.8	257.0	0.29	29.8	0.29
Illinois	1,855.0	1,840.4	0.09	98.8	0.09
Indiana	1,672.0	1,672.8	0.12	23.6	0.12
Iowa	1,379.8	1,364.9	0.22	75.8	0.22
Kansas	799.3	798.0	0.10	26.9	0.10
Kentucky	1,396.4	1,398.3	0.66	259.8	0.66
Louisiana	848.3	838.2	0.64	28.1	0.64
Maine	817.4	806.1	0.22	37.7	0.22
Maryland	43.1	43.1	**	**	**
Massachusetts	2,434.8	2,419.2	0.07	44.6	0.07
Michigan	2,106.5	2,105.5	0.04	33.9	0.04
Minnesota	1,495.5	1,481.1	0.08	37.8	0.08
Mississippi	1,009.4	1,002.5	0.28	78.1	0.28
Missouri	1,397.1	1,397.8	0.03	12.2	0.03
Montana	606.3	590.2	0.33	43.3	0.33
Nebraska	763.3	766.4	0.16	26.7	0.16
Nevada	0.0	0.0	0.00	0.0	0.00
New Hampshire	459.1	450.9	1.39	166.1	1.39
New Jersey	3,502.9	3,265.1	0.92	759.3	0.92
New Mexico	483.1	482.0	0.09	11.9	0.09
New York	3,651.8	3,652.5	0.05	86.1	0.05
North Carolina	1,286.0	1,284.1	0.03	11.6	0.03
North Dakota	325.5	302.7	1.08	90.5	1.08
Ohio	3,943.6	4,000.7	0.45	466.6	0.45
Oklahoma	1,990.3	2,021.3	0.71	278.8	0.71
Oregon	812.0	809.0	0.09	20.5	0.09
Pennsylvania	2,633.5	2,595.6	0.10	114.8	0.10
Rhode Island	189.0	185.4	0.05	5.1	0.05
South Carolina	1,226.1	1,226.9	0.19	64.3	0.19
South Dakota	327.2	325.2	0.10	8.8	0.10
Tennessee	1,401.8	1,396.0	0.04	17.4	0.04
Texas	3,207.6	3,100.3	0.27	510.6	0.27
Utah	271.3	272.1	0.07	7.3	0.07
Vermont	313.1	311.8	0.31	19.4	0.31
Virginia	1,320.6	1,315.6	0.03	18.7	0.03
Washington	1,808.4	1,803.3	0.07	26.2	0.07
West Virginia	0.0	0.0	0.00	0.0	0.00
Wisconsin	1,556.2	1,554.8	0.08	33.7	0.08
Wyoming	227.7	208.4	0.38	27.0	0.38

** Standard error less than 0.05 for number estimate or 0.005 for percentage estimate.

NOTE: Standard errors for Delaware, the District of Columbia, Hawaii, Nevada, and West Virginia are "0.0" for numbers and "0.00" for percentages because all school districts in these jurisdictions were included in the sample.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88.

Table 17. -- Standard errors for teacher salary schedules, averaged for public school districts, by earned degree and experience, and by state: 1987-88 (table 11)

State	Bachelor's and no experience	Master's and no experience	Master's and 20 years experience
TOTAL	\$48.8	\$48.3	\$113.1
Alabama	111.2	119.4	82.8
Alaska	328.0	276.5	655.3
Arizona	303.6	257.0	841.3
Arkansas	144.2	139.6	234.4
California	198.4	288.2	736.0
Colorado	196.7	229.7	461.5
Connecticut	153.3	264.4	621.2
Delaware	0.0	0.0	0.0
District of Columbia	0.0	0.0	0.0
Florida	77.4	329.2	540.2
Georgia	84.6	124.6	194.8
Hawaii	0.0	0.0	0.0
Idaho	112.5	261.5	423.2
Illinois	213.6	228.5	539.6
Indiana	74.7	172.9	301.0
Iowa	160.0	115.5	193.1
Kansas	110.2	126.8	321.9
Kentucky	84.7	84.8	279.3
Louisiana	137.0	139.2	319.0
Maine	58.3	83.7	482.1
Maryland	30.1	79.1	99.2
Massachusetts	330.9	432.3	954.4
Michigan	109.6	129.5	346.4
Minnesota	207.8	182.8	311.9
Mississippi	64.1	67.0	155.7
Missouri	194.2	225.5	430.7
Montana	306.1	328.3	540.5
Nebraska	184.1	321.8	508.8
Nevada	0.0	0.0	0.0
New Hampshire	268.5	499.1	572.4
New Jersey	137.4	180.6	442.2
New Mexico	228.0	296.4	1039.7
New York	125.4	218.1	321.6
North Carolina	41.4	41.6	240.3
North Dakota	154.5	266.3	394.7
Ohio	123.6	140.1	414.5
Oklahoma	118.1	121.4	269.7
Oregon	176.7	243.3	771.7
Pennsylvania	201.0	213.1	301.1
Rhode Island	88.0	112.8	225.7
South Carolina	176.5	141.9	353.9
South Dakota	80.2	133.2	318.6
Tennessee	150.5	220.5	499.2
Texas	91.1	92.5	132.5
Utah	182.5	252.9	371.1
Vermont	143.8	173.6	455.7
Virginia	163.5	186.2	389.5
Washington	65.6	135.4	420.4
West Virginia	0.0	0.0	0.0
Wisconsin	110.3	191.0	257.9
Wyoming	110.7	124.2	305.1

NOTE: Standard errors for Delaware, the District of Columbia, Hawaii, Nevada, and West Virginia are "0.0" because all school districts in these jurisdictions were included in the sample.

SOURCE: U.S. Department of Education, National Center for Education Statistics Schools and Staffing Survey, 1987-88.

Technical Notes

Selection of public school districts (LEAs)

There were 5,594 LEAs in the public school district sample for the TDS survey of LEA's. These are the LEAs associated with the 9,317 public schools in the school sample (including the one school district in Hawaii and the one school district in the District of Columbia); all LEAs in Delaware, West Virginia, and Nevada that were not associated with the sample schools; and a sample of eight LEAs that do not operate schools, but do hire teachers and otherwise serve schools in other LEAs. The LEAs in Delaware, West Virginia, and Nevada were added because the sample LEAs alone were too few to provide reliable state estimates.

Selection of schools

The public school sample of 9,317 schools was selected from the Quality Education Data (QED) file of public schools. All public schools in the file were stratified by the 50 states and the District of Columbia, and then by three grade levels (elementary, secondary, and combined). For each stratum within each state, sample schools were selected by systematic (interval) sampling with probability proportional to the square root of the number of teachers within a school.

All 3,513 private schools in the private school sample received both a **Teacher Demand and Shortage Questionnaire** and a **Private School Questionnaire**. The private school sample was selected primarily from the QED file of private schools. Since this list of private schools did not fully cover all private schools in the country, two additional steps were taken to improve coverage. The first step was to update the QED file with current lists of schools from 17 private school associations. All private schools on the QED file and the lists from the private associations were then stratified by state, grade level, and affiliation. Sample schools were then selected by systematic (interval) sampling within each stratum, with probability proportional to the square root of the number of teachers. The second step was to include an area frame of schools, contained in 75 probability selected Primary Sampling Units (PSUs), each PSU consisting of a county or group of counties. The PSUs were stratified by Census geographic region: Northeast, West, South, and Midwest; Metropolitan Statistical Area (MSA) status (MSA or non MSA); and private school enrollment (two groups). These PSUs were selected from the universe of 2,497 PSUs with probability proportional to the square root of the PSU population. Within each of the 75 PSUs, a telephone search was made to find all eligible (in-scope) private schools, using such

sources as phone books, non Roman Catholic religious institutions, local education agencies, chambers of commerce, local government offices, commercial milk companies, and commercial real estate offices. Roman Catholic religious institutions were not contacted because QED calls each Catholic diocese during its annual list update. All schools not on the QED file or the lists from the private school associations were eligible to be selected for the area sample. Most of these schools were selected with certainty. However, when sampling was performed, schools in the area frame that could be contacted were sampled with probability proportional to the square root of the number of teachers, and those that could not be contacted were selected using a systematic equal probability sampling procedure. A private school was declared out-of-scope and excluded from the sample if it did not have any students in any of grades 1-12, if it operated in a private home that was used as a family residence, or if it was undetermined whether it operated in a private home and its enrollment was less than 10 students or it had only one teacher.

Selection of teachers

All 56,242 public and 11,529 private school teachers in the teacher samples were selected from the 9,317 public and 3,513 private sample schools. A list which included all full-time and part-time teachers, itinerant teachers, and long-term substitutes was obtained from each sample school. Within each school, teachers were stratified by experience; one stratum included new teachers, and a second stratum included all other teachers. New teachers were those who, counting the 1987-88 school year, were in the first, second, or third year of their teaching career in either a public or private school system. Within each teacher stratum, elementary and secondary teachers were sorted by subject. Elementary teachers were sorted by General Elementary Education, Special Education, and other; secondary teachers were sorted by mathematics, science, English, social science, vocational education, and other.

The public and private school teacher samples were each designed to include a basic sample and a Bilingual/ESL(English as a Second Language) supplement. The Bilingual/ESL supplement treated as one group teachers who use a native language other than English to instruct students having limited English proficiency, and teachers who provide students having limited English proficiency with intensive instruction in English. The supplement was funded by the Department of Education's Office of Bilingual Education and Minority Language Affairs (OBEMLA) in order to obtain more reliable estimates of Bilingual/ESL teachers.

The basic sample of teachers was allocated to the sample schools in each stratum so that the teacher weights were approximately equal. The specified average teacher sample size for each sample school (4, 8, and 6 teachers for each public elementary, secondary, and combined school, respectively; and 4, 5, and 3 teachers for each private elementary, secondary, and combined school, respectively) was then allocated to the two teacher strata to obtain a 60 percent oversampling of new private school teachers. New teachers were not oversampled in the public sector. Finally, an equal probability systematic sampling scheme was applied to select the basic sample within each school. The Bilingual/ESL supplement was selected independently from the basic sample, and was designed to provide estimates for California, Texas, Florida, Illinois, New York, and all other states. Within a school containing Bilingual/ESL teachers, teachers were selected systematically with equal probability.

The sample sizes were as follows:

Basic samples	
Public	54,340
Private	11,412
Bilingual/ESL supplement samples	
Public	2,258
Private	183

Bilingual/ESL teachers selected in both the basic and supplement samples were unduplicated so that each teacher appears only once in the combined sample of Bilingual/ESL and all other teachers.

In the data collection phase of the survey, a subsample of nonmail returns (57 percent of nonmail returns) was followed up by telephone during April, May, and June. This subsample had their weights adjusted to reflect the subsampling.

More detailed information about the sampling will be available from a forthcoming technical report.

Data collection

The TDS questionnaires were mailed to the sampled LEAs and private schools during late January to late February 1988. Approximately six weeks after the initial mailout, a second questionnaire was mailed to those sample cases that did not return the first questionnaire. One month after the second mailout of the questionnaires, a telephone followup was begun. Interviewers contacted the sample cases that failed to return a questionnaire

and attempted to complete an interview by telephone. All nonresponse cases from the mailout phase were included in the telephone followup.

Effects of missing school districts and schools

Following the data collection for all survey instruments, it was discovered, in a comparison of SASS public school estimates with NCES' Public Elementary/Secondary School Universe Survey of the Common Core of Data (CCD) series, that some Class 1 public school districts were not on the frame. Class 1 districts include only elementary schools. For Nebraska, a comparison of the QED and CCD counts indicated there were about 275 of these schools, with an average of about 10.2 students per school. Because of these missing school districts and schools, the SASS national estimates of counts of public school districts, schools, administrators, and teachers, and the corresponding counts for Nebraska, in particular, are underestimated. The effects of these missing school districts on the nature of the bias for averages is unknown.

Questionnaire response rates

Weighted response rates were 90.8 percent for the public school TDS questionnaire and 66.0 percent for the private school TDS questionnaire. Among private schools, the response rate was 84.3 percent for schools with a Catholic affiliation; 55.9 percent for schools with a religious affiliation other than Catholic; 57.4 percent for nonsectarian schools; and 13.8 percent for a small number of schools in the area sample whose affiliation was unknown. The data were weighted to reflect the universe of public school districts and the universe of private schools. The weights were subsequently adjusted for survey nonresponse.

The low response rate for private schools other than Catholic, and a low response rate for public school districts in Connecticut (61.1 percent) may affect the reliability of the estimates for private schools and the state estimates for Connecticut. Caution should therefore be exercised in the interpretation of the private school estimates and the state estimates for Connecticut.

Item descriptions

The TDS questionnaire for public school districts (LEAs) is shown in appendix A-1. With some exceptions (see appendix A-2) it is identical to the TDS questionnaire for private schools. Specific data items in the tables and the corresponding source codes (numbers from 011 to 159 in bold type in the questionnaires) for those data items are shown below. Except for the items on "pay

incentives for attracting teachers to less desirable locations," which are not included in the TDS questionnaire for private schools, the source codes for all questionnaire items are the same in both questionnaires.

Data item	Source code
LEA size/private school size	021
Number of FTE teachers	
all	047
certified	052
continuing	047 minus 053
continuing and certified	052 minus 054
newly hired	053
newly hired and certified	054
Total FTE positions	
approved	051
filled	051 minus 050
unfilled	050
vacant	048
withdrawn	049
*Pay incentives for attracting teachers to less desirable locations	
Cash bonus	091
Different step on salary schedule	092
Other salary increase	093
Pay incentives for attracting teachers to fields of shortage	
Cash bonus	095
Different step on salary schedule	096
Other salary increase	097
Fields in which pay incentives are offered	
Special Education	099
Mathematics	100
Computer Science	101
Physical Sciences	102
Biological/life sciences	103
Bilingual education/ESL	104
Foreign languages	105
Other	106
Teacher salary schedules by earned degree and experience	
Bachelor's and no experience	082
Master's and no experience	083
Master's and 20 years	084

* Public school districts only

Source code response rates

The unweighted average response rate for source codes was 92.9 percent for the TDS questionnaire for public school districts, and 91.5 percent for the TDS questionnaire for private schools. (These rates did not include the source code response rates for questionnaire items 9 and 10, which were deleted from the data tapes because of low response rates and reporting problems.) For the subset of variables included in this report, the unweighted average response rate was 97.5 percent for public school districts, and 94.2 percent for private schools. Source code response rates for this subset of variables ranged from 94.9 to 99.7 percent on the school district TDS questionnaire and from 77.4 to 99.6 percent on the private school TDS questionnaire. Data items on both questionnaires were imputed for nonresponse using a hot deck procedure.

Comparison of teacher counts from the SASS TDS file with counts from other SASS files and the School Universe File of the Common Core of Data

Estimates of teacher counts from the SASS teacher demand and shortage, teacher, and school files can be expected to vary. First, the data sources are different: they are public school districts, teachers, and schools. Second, the teacher demand and shortage survey yields teacher counts in FTEs (full-time equivalents), the teacher survey yields teacher counts in head counts, and the school survey yields teacher counts in both FTEs and head counts.

The sampling frame for teachers was developed by obtaining from each sample school a list of all full-time and part-time teachers, itinerant teachers, and long term substitutes. Following the data collection, a comparison of the number of teachers on the school lists with the number of teachers (head count) on the school file revealed fewer teachers on the school lists. Fewer teachers on the school lists cause the teacher national estimates from the teacher files to be underestimates relative to the teacher national estimates from the school files. To obtain an estimate of the magnitude of these underestimates, an FTE count of teachers on the teacher questionnaire was approximated by adjusting the counts for part-time teachers. This approximated FTE count was weighted up to a national estimate and compared with the national FTE estimate

for fall, 1987, reported on NCES's Public Elementary/Secondary School Universe Survey of the Common Core of Data (CCD) series. The CCD estimate was 2 percent higher than the SASS estimate.

There are significant differences between the FTE teacher estimates obtained on the Teacher Demand and Shortage Questionnaire for Public School Districts and the FTE teacher counts obtained on the fall, 1987 CCD. (A difference was considered significant if it was greater than twice the standard error for the TDS estimate.) The national estimate, 2,316,015, is significantly higher than the national count, 2,278,813. Comparisons of state estimates and counts show that TDS estimates were significantly higher for nine states (California, Delaware, Hawaii, Montana, New Hampshire, New York, North Carolina, Tennessee, and Virginia) and significantly lower for 11 states (Arizona, Florida, Louisiana, Maryland, Nevada, New Mexico, Texas, Utah, Vermont, and West Virginia) and the District of Columbia. Some of these differences may be attributable to the absence of small districts from the QED frame (see preceding section, effects of missing school districts and schools).

Although the difference between the TDS estimate and the CCD count for Nebraska is not significant, the TDS estimate is an underestimate, and caution must be exercised in the use and interpretation of this and other TDS estimates for the state. This underestimation has occurred because one of the largest school districts in the state did not participate in the SASS. The consequent nonresponse adjustment, which takes into account the size of the other districts in the state, most of which are much smaller, results in state estimates which are underestimates.

Comparison of the private school count from the SASS TDS file with the count from the SASS private school file

The estimated number of private schools, reported in table 6 of this E.D. TABS is 26,898, while the estimate reported in the E.D. TABS, "Comparisons of Public and Private Schools, 1987-88," is 26,807. The difference between these estimates is attributable to the use of two different SASS questionnaires. The Teacher Demand and Shortage Questionnaire for Private Schools was used in obtaining the first estimate, and the Private School Questionnaire was used in obtaining the second estimate. The difference is not statistically significant.

Underestimation of the number of school districts

Estimated counts of school districts from the TDS data collection are underestimates relative to CCD counts because of missing school districts on the QED frame and a difference between the QED and CCD definition of school district. Unlike CCD, QED defines a school district in terms of location rather than administrative unit. Thus, in those states which house together the offices of more than one school district, the QED estimated count of school districts will be lower than the CCD count.

Standard errors

The estimates in these tables are based on samples and are subject to sampling variability. Standard errors were estimated using a balanced repeated replication procedure that incorporates the design features of this complex sample survey. The standard errors provide indications of the precision of each estimate. If all possible samples of the same size were surveyed under the same conditions, an interval of 1.96 standard errors below to 1.96 standard errors above a particular statistic would include the universe value in approximately 95 percent of the cases. Note, however, that the standard errors in the tables do not take into account the effects of biases due to item nonresponse, measurement error, data processing error, or other systematic error. Standard errors for selected tables are presented in tables 12 through 16. Standard errors for other estimates are available on request.

Definitions

The following terms are defined on pages 4 and 10 of both the Teacher Demand and Shortage Questionnaire for Public School Districts (LEAs) and the Teacher Demand and Shortage Questionnaire for Private Schools:

Page 4

Abolished/withdrawn position

FTE

Newly hired teachers

Positions vacant, filled by a substitute teacher, or withdrawn

Regular or standard state certification

Page 10

Cash bonus

Different step on salary schedule

Other salary increase

**Geographic Regions used by the
U.S. Bureau of the Census**

West

Montana
Idaho
Wyoming
Colorado
New Mexico
Arizona
Utah
Nevada
Washington
Oregon
California
Alaska
Hawaii

Midwest

Ohio
Indiana
Illinois
Michigan
Wisconsin
Minnesota
Iowa
Missouri
North Dakota
South Dakota
Nebraska
Kansas

Northeast

Maine
New Hampshire
Vermont
Massachusetts
Rhode Island
Connecticut
New York
New Jersey
Pennsylvania

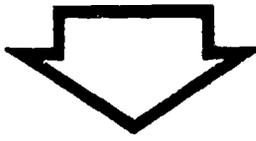
South

Delaware
Maryland
District of Columbia
Virginia
West Virginia
North Carolina
South Carolina
Georgia
Florida
Kentucky
Tennessee
Alabama
Mississippi
Arkansas
Louisiana
Oklahoma
Texas

Acknowledgments

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Appendices

<p>FORM SASS-1A (10-30-87)</p> <p>U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS ACTING AS COLLECTING AGENT FOR CENTER FOR EDUCATION STATISTICS U.S. DEPARTMENT OF EDUCATION</p> <p>SCHOOLS AND STAFFING SURVEY TEACHER DEMAND AND SHORTAGE QUESTIONNAIRE FOR PUBLIC SCHOOL DISTRICTS (LEAs)</p> <p>1987-1988</p>	<p>OMB No. 1850-0621 Approval Expires December 31, 1988</p> <p>This report is authorized by law (20 U.S.C. 1221e-1). Your answers will be kept strictly confidential. The release of information contained on this form is restricted in conformance with the Privacy Act of 1974 (Public Law 93-579, as amended).</p> <p>RETURN TO</p> <p>Bureau of the Census Current Projects Branch 1201 East Tenth Street Jeffersonville, IN 47132</p>
<p>Dear District Administrator:</p> <p>The Center for Education Statistics (CES) of the U.S. Department of Education requests your participation in the Teacher Demand and Shortage Survey for the 1987-88 Schools and Staffing Survey. Your district is one of the 5,600 districts from across the Nation selected to be in the district sample.</p> <p>The Schools and Staffing Survey is an integrated set of surveys consisting of the Teacher Demand and Shortage Survey, the School and School Administrator Surveys, and the Teacher Survey. These surveys are revisions of previous CES surveys, designed to better measure critical aspects of teacher supply and demand, the composition of the administrator and teacher workforce, and the status of teaching and schooling generally. The purpose of the Teacher Demand and Shortage Survey is to obtain information about such factors as district enrollment, policies, and staff characteristics including the number of teaching positions, by field, that are filled or remain unfilled.</p> <p>The U.S. Bureau of the Census is conducting the surveys for the Center for Education Statistics by the authority of Section 406(b) of the General Education Provisions Act, as amended (20 USC 1221e). The data will be treated as confidential.</p> <p>We are conducting this survey with a sample of districts. While this minimizes overall response burden, the value of each individual survey response is greatly increased because it represents many other districts. I, therefore, encourage you to participate in this voluntary survey by completing this questionnaire and returning it within 3 weeks to the Bureau of the Census. A preaddressed envelope is enclosed for your convenience.</p> <p>I thank you for your cooperation in this very important effort.</p> <p>Sincerely,</p>  <p>Emerson J. Elliott Director Center for Education Statistics</p> <p>Enclosure</p>	<p><i>Please correct any error in name and address including ZIP Code.</i></p> 

Remarks

INSTRUCTIONS

If you are unsure about how to answer a question, please give the best answer you can and make a comment in the "Remarks" section.

Use the enclosed postage-paid envelope to return this questionnaire to the Bureau of the Census. Please return it within the next 3 weeks.

If you have any questions, please call the Bureau of the Census collect at (301) 763-2220.

THANK YOU FOR TAKING PART IN THIS STUDY.

a. Please give your name, title, telephone number, and the most convenient days/time to reach you. This information will be used only if it is necessary to clarify any of your responses.

Name

Title

Telephone number (include area code)

Convenient days/times to reach you, if necessary

b. Does your school district hire and employ elementary and/or secondary teachers?

PGM 3

011

1 Yes — Go to page 4

2 No

IF YOU ANSWERED "NO" TO ITEM (b) ABOVE, PLEASE STOP NOW AND RETURN YOUR QUESTIONNAIRE TO THE BUREAU OF THE CENSUS. THANK YOU FOR YOUR TIME.

Remarks

SECTION A — ENROLLMENT AND TEACHING POSITIONS

GLOSSARY

The following terms are used in questions 2–10. They have been defined here in alphabetical order for your convenience.

Abolished/withdrawn position — Teaching position for which a teacher was sought and could not be found during the recruiting period, resulting in the abolishment/withdrawal/closing of the position.

FTE — Full-time equivalent describes the number of positions in terms of an average full day. The FTE for a given person is derived by dividing the amount of time the person works by the amount of time normally required for a full day.

For example, if a normal teaching day includes 5 periods, report:

- a person teaching 5 periods of English as 1.0 in English;
- a person teaching 3 periods of English and 2 periods of social studies as 0.6 English and 0.4 social studies;
- a person teaching only 3 periods of English as 0.6 English;
- a person teaching English 3 periods and doing guidance counseling the equivalent of 2 periods as 0.6 English; do NOT report the time doing guidance counseling.

Report prekindergarten and kindergarten teachers as 1.0 if they teach a full-day session or two half-day sessions per day. Report them as 0.5 if they teach one half-day session each day.

Record all FTE entries to the nearest tenth.

Laid-off teachers — Teachers whose contracts were not renewed at the end of the 1986–87 school year because of budget limitations, declining enrollments, or elimination of courses, and whose positions were not subsequently filled. Does NOT include those who were "fired" or whose contracts were not renewed for performance reasons.

Newly hired teachers — Teachers newly hired as regular employees by this school system for the 1987–88 school year. Includes teachers returning from unpaid leaves of absence of one year or more. Does NOT include substitute teachers.

Positions vacant, filled by a substitute teacher, or withdrawn — Positions approved for the 1987–88 school year (budgeted new positions or position vacancies) which were vacant, filled by a substitute teacher, or withdrawn as of October 1, 1987, because a suitable candidate could not be found.

Regular or standard state certification — Pertains to a teacher who has met your state's regular or standard certification requirements in his or her assigned field(s), i.e., subject area. Includes those who have completed all necessary course work and practice teaching and are eligible for full certification upon completion of a probationary period. **NOTE** — Teachers with only emergency or other nonstandard certification are NOT considered "certified" for this survey's purpose.

1. How many students (in head counts) were enrolled in this district on or about October 1, 1986, and October 1, 1987?

(If your district has "ungraded" students, allocate the total number of such students into the enrollment categories as best you can based on the approximate grade levels of the students.)

Category (1)	Enrollment Fall 1986 (2)	Enrollment Fall 1987 (3)
a. Prekindergarten	012 _____ o <input type="checkbox"/> None	013 _____ o <input type="checkbox"/> None
b. Kindergarten	014 _____ o <input type="checkbox"/> None	015 _____ o <input type="checkbox"/> None
c. Grades 1–6	016 _____ o <input type="checkbox"/> None	017 _____ o <input type="checkbox"/> None
d. Grades 7–12	018 _____ o <input type="checkbox"/> None	019 _____ o <input type="checkbox"/> None
e. Total, all levels	020 _____ o <input type="checkbox"/> None	021 _____ o <input type="checkbox"/> None

2. Enter the number of FTE teachers hired and employed by this district at each of the following levels as of October 1, 1986, and as of October 1, 1987. Do not include student teachers or substitute teachers.

(Record FTE teachers to the nearest tenth.)

FTE teachers (1)	Oct. 1, 1986 (2)	Oct. 1, 1987 (3)
a. Prekindergarten	022 _____ o <input type="checkbox"/> None	023 _____ o <input type="checkbox"/> None
b. Kindergarten	024 _____ o <input type="checkbox"/> None	025 _____ o <input type="checkbox"/> None
c. Grades 1–6	026 _____ o <input type="checkbox"/> None	027 _____ o <input type="checkbox"/> None
d. Grades 7–12	028 _____ o <input type="checkbox"/> None	029 _____ o <input type="checkbox"/> None
e. Total FTE teachers	030 _____	031 _____

SECTION A – ENROLLMENT AND TEACHING POSITIONS – Continued

3. If your records do not classify teachers by the grade ranges indicated in item 2, mark the box at right and indicate the grades you included in categories c and d of item 2.

032 Records not by grade ranges in item 2

Category c		Category d	
033	<input type="checkbox"/> 1st	041	<input type="checkbox"/> 7th
034	<input type="checkbox"/> 2nd	042	<input type="checkbox"/> 8th
035	<input type="checkbox"/> 3rd	043	<input type="checkbox"/> 9th
036	<input type="checkbox"/> 4th	044	<input type="checkbox"/> 10th
037	<input type="checkbox"/> 5th	045	<input type="checkbox"/> 11th
038	<input type="checkbox"/> 6th	046	<input type="checkbox"/> 12th
039	<input type="checkbox"/> 7th		
040	<input type="checkbox"/> 8th		

Refer to item 2 on page 4.

4. Record the total FTE teachers who teach grades K-12, i.e., the 1987 total FTE teachers minus the 1987 prekindergarten.

047

5a. As of October 1, 1987, how many FTE teaching positions were vacant or temporarily filled by a substitute teacher?

048
 None

b. How many FTE teaching positions were abolished or withdrawn between the start of the hiring season and October 1, 1987?

049
 None

c. Record total of (a) and (b) above.

050
 None

6. Record the total number of FTE teaching positions approved for the 1987-88 school year.

(Sum of entries in items 4 and 5c)

051

7. Of the total FTE teachers cited in item 4, how many hold regular or standard state certification in their fields of assignment?

052

8a. As of October 1, 1987, how many FTE teachers were newly hired by this school district for the 1987-88 school year?

053 *Continue with 8b*
 None – *Skip to Check Item A below*

b. How many of these newly hired FTE teachers hold regular or standard state certification in their fields of assignment?

054
 None

CHECK ITEM A

In question 5a above, you were asked for the number of FTE teaching positions that were vacant or temporarily filled by a substitute teacher. Would you be able to easily provide separate counts for (a) positions temporarily filled by substitutes, and (b) other vacant positions for which you are still recruiting? *(Do not provide counts; just indicate whether the data are available.)*

055 1 Yes
 2 No

SECTION A – ENROLLMENT AND TEACHING POSITIONS – Continued

INSTRUCTIONS FOR QUESTIONS 9 AND 10 – Please fill in the two tables about this district's teaching positions by field of assignment (i.e., subject area). Use listed subject fields to the fullest extent possible. When no appropriate field is listed, use "other." In cases where teachers are assigned to more than one field, apportion time spent in each field.

If your district does not have any of grades K-6, mark (X) the box and skip to question 10.

PGM 3 056

No grades K-6 – Skip to item 10

GRADES K-6 TEACHERS – FTE

9. Please fill in the table about your FTE teaching positions for grades K-6. (See definition of FTE on page 4.)	Number of FTE teachers as of October 1, 1987			Number of FTE positions	
	Total FTE teachers (a)	Total number of NEWLY HIRED FTE teachers (c)	NEWLY HIRED FTE teachers holding regular or standard state certification in field of assignment (d)	FTE positions vacant, filled by a substitute teacher or withdrawn as of 10/1/87 because a suitable candidate could not be found (e)	FTE teachers laid off at the end of the 1986-87 school year (f)
PGM 4					
1. KINDERGARTEN
2. GENERAL ELEMENTARY (Exclude kindergarten)
SPECIAL AREAS (Exclude kindergarten and general elementary)					
3. Art
4. Basic skills and remedial education *
5. Bilingual *
6. Computer science
7. English as a second language (ESL)
8. English language arts
9. Foreign language
10. Gifted *
11. Health, physical education
12. Home economics
13. Industrial arts
14. Mathematics
15. Music
16. Science
17. Reading
18. Religion/philosophy
19. Social studies/social science
20. SPECIAL EDUCATION (TOTAL)
a. Mentally retarded
b. Emotionally disturbed
c. Learning disabled
d. Speech and hearing impaired
e. Other special education
21. ALL OTHERS
22. TOTAL GRADES K-6 * *

* If bilingual, basic skills, gifted, or remedial education teachers teach general elementary or specific areas (e.g., remedial math or bilingual science), count them only in the bilingual, basic skills, gifted, or remedial education categories.

** Entry in column (b) of line 22 should equal sum of entries in categories b and c in column (3) of item 2 on page 4.

SECTION A – ENROLLMENT AND TEACHING POSITIONS – Continued

If your district does not have any of grades 7-12, mark (X) the box and skip to Check Item B.

PGM 3 057

No grades 7-12 – Skip to Check Item B on page 8

GRADES 7-12 TEACHERS – FTE

10. Please fill in the table about your FTE teaching positions for grades 7-12. (See definition of FTE on page 4.)	Number of FTE teachers as of October 1, 1987			Number of FTE positions	
	Total FTE teachers	Total number of NEWLY HIRED FTE teachers	NEWLY HIRED FTE teachers holding regular or standard state certification in field of assignment (d)	FTE positions vacant, filled by a substitute teacher, or withdrawn as of 10/1/87 because a suitable candidate could not be found (e)	FTE teachers laid off at the end of the 1986-87 school year (f)
PGM 5 (a)	(b)	(c)	(d)	(e)	(f)
1. GENERAL ELEMENTARY
2. Art
3. Basic skills and remedial education *
4. Bilingual *
5. Business education
6. Computer science
7. English as a second language (ESL)
8. English language arts
9. Foreign language
10. Health, physical education
11. Home economics
12. Industrial arts
13. Mathematics
14. Music
15. Reading
16. Religion/philosophy
17. Social studies/social science
18. SCIENCE (TOTAL)
a. Biology
b. Chemistry
d. Earth science
c. Physics
e. General and all other science
19. SPECIAL EDUCATION (TOTAL)
a. Mentally retarded
b. Emotionally disturbed
c. Learning disabled
d. Speech and hearing impaired
e. Other special education
20. VOCATIONAL EDUCATION
21. ALL OTHERS
22. TOTAL GRADES 7-12 **

* If bilingual, remedial education, or basic skills teachers teach specific subject areas (e.g., remedial reading or bilingual math), count them only in the bilingual, remedial education or basic skills category.

** Entry in column (b) of line 22 should equal entry in category d of column (3) in item 2 on page 4.

SECTION A – ENROLLMENT AND TEACHING POSITIONS – Continued

CHECK ITEM B

Column (e) on pages 6 and 7 is labeled **PGM 3**. "FTE positions vacant, filled by a substitute teacher, or withdrawn as of 10/1/87 because a suitable candidate could not be found." Would you be able to easily provide each piece of information separately, that is, separate counts for vacant positions, separate counts for positions filled by substitute teachers, and separate counts for positions withdrawn? (Do not provide the counts; just indicate whether the data are available.)

- 058 1 Yes
2 No

CHECK ITEM C

On page 6, did you make any entries in column (b) of the Special Areas section (lines 3-19)?

- 059 1 Yes – Continue with item 11a
2 No – Skip to Check Item D below

11a. Are any of the Special Area teachers reported in column (b) on page 6 assigned to more than one teaching field (e.g., a teacher who teaches both math and science)?

- 060 1 Yes -- Continue with 11b
2 No -- Skip to Check Item D below

b. Approximately what percent of the Special Area teachers reported in column (b) on page 6 have more than one field of assignment? (Record percent in whole numbers, not tenths. Do not enter a decimal point.)

061 _____ .0 %

c. How was their time allocated in column (b) on page 6? Mark (X) only one box.

- 062 1 Split between subject fields according to actual FTE's (e.g., 0.3 math and 0.7 science)
2 Split equally between the fields regardless of actual FTE (e.g., 0.5 math and 0.5 science)
3 By primary field of assignment only

d. In completing column (d) on page 6 for new teachers with more than one assignment field, were you able to report certification status for all fields of assignment?

- 063 1 Yes
2 No
3 Not applicable

CHECK ITEM D

Did you report any teachers in column (b) on page 7?

- 064 1 Yes – Continue with item 12a
2 No – Skip to item 13

12a. Are any of the teachers reported in column (b) on page 7 assigned to more than one field (e.g., a teacher who teaches both math and physics)?

- 065 1 Yes -- Continue with 12b
2 No -- Skip to Check Item E below

b. Approximately what percent of the teachers reported in column (b) on page 7 have more than one field of assignment? (Record percent in whole numbers, not tenths. Do not enter a decimal point.)

066 _____ .0 %

c. How was their time allocated in column (b) on page 7? Mark (X) only one box.

- 067 1 Split between subject fields according to actual FTE's (e.g., 0.7 math and 0.3 science)
2 Split equally between the fields regardless of actual FTE (e.g., 0.5 math and 0.5 physics)
3 By primary field of assignment only

d. In completing column (d) on page 7 for new teachers with more than one assignment field, were you able to report certification status for all fields of assignment?

- 068 1 Yes
2 No
3 Not applicable

CHECK ITEM E

On page 7, teaching field number 17 is "Social studies/social science." Would you be able to easily provide separate counts for each specific field such as history, geography, government/civics, psychology, economics, and sociology? (Do not provide the counts; just indicate whether the data are available.)

- 069 1 Yes
2 No

SECTION B – DISTRICT POLICIES

Teacher Compensation

13. Which of the following benefits are available to teachers in your district?

Mark (X) all that apply.

- 070 1 **GENERAL MEDICAL INSURANCE**
District (or other organization) pays part or all of premium
- 2 Teachers pay all of premium
- 071 3 **DENTAL INSURANCE**
District (or other organization) pays part or all of premium
- 4 Teachers pay all of premium
- 072 5 **GROUP LIFE INSURANCE**
District (or other organization) pays part or all of premium
- 6 Teachers pay all of premium
- 073 7 **PENSION CONTRIBUTIONS**
- 074 8 **INCOME-IN-KIND**
Housing
- 075 9 Meals (include free or reduced price lunch)
- 076 10 Transportation
- 078 12 **REIMBURSEMENT FOR TEACHERS' TUITION AND COURSE FEES**
- 079 13 Other – Specify

14. How many days or months is the normal work year for a teacher receiving a full salary?

(Report in whole days or whole months, whichever is appropriate for your district.)

- 080 _____ Days
- OR
- 081 _____ Months

15. What is the normal yearly starting salary in your district for a teacher with a bachelor's degree and no previous teaching experience?

(Enter salary amount in whole dollars. Do not include benefits.)

082 \$ _____ .00 per year

16. According to your salary schedule, what is the normal yearly contract salary for –

a. A teacher with a master's degree (or its equivalent in credits beyond the bachelor's degree) and no previous teaching experience?

083 \$ _____ .00 per year

b. A teacher with a master's degree (or its equivalent in credits) and 20 years of teaching experience?

084 \$ _____ .00 per year

17. What is the AVERAGE GROSS yearly salary paid to teachers in your district? (Exclude benefits.)

085 \$ _____ .00 per year

18a. In this school year, does your district have a "merit pay" plan for teachers? (A "merit pay" plan is a system in which a teacher's performance is a significant factor in determining his or her compensation.)

- 086 1 Yes – Continue with 18b
- 2 No – Skip to 19

b. How is this performance-based compensation given?

Mark (X) all that apply.

- 087 1 Cash bonus (i.e., supplement(s) to regular compensation over the year but no permanent increase in salary)
- 088 2 One-time step increase on the salary schedule
- 089 3 Other salary increase (e.g., increase in base salary or salary classification)



SECTION B – DISTRICT POLICIES – Continued

Teacher Compensation – Continued

The following definitions of pay incentives pertain to questions 19a–d.

Cash bonus – An amount of money given once within an interval of time as an incentive to a person to teach in a particular field or location.

Different step on salary schedule – Placement of a teacher on a higher step of the salary schedule if the teacher agrees to teach in a particular field or location.

Other salary increase – Increase in base salary or other raise in salary through reclassification (other than a step increase on the salary schedule).

19a. Does your school district use any of the pay incentives listed above to recruit or retain teachers to teach in less desirable locations or in fields of shortage?

- 090 1 Yes – Continue with 19b
2 No – Skip to 20a

b. Which of these pay incentives are offered to attract teachers to less desirable locations?

Mark (X) all that apply.

- 091 1 Cash bonus
092 2 Different step on salary schedule
093 3 Other salary increase
094 4 None of the above

c. Which of these pay incentives are offered to attract teachers to fields specified by your district as fields of shortage?

Mark (X) all that apply.

- 095 1 Cash bonus
096 2 Different step on salary schedule
097 3 Other salary increase
098 4 None of the above – Skip to 20a
- } Continue with 19d

d. In which fields are any of these incentives offered?

Mark (X) all that apply.

- 099 1 Special education
100 2 Mathematics
101 3 Computer science
102 4 Physical sciences
103 5 Biological/life sciences
104 6 Bilingual education/ESL
105 7 Foreign languages
106 8 Other – Specify ↴

20a. Is free retraining available in your school district (regardless of funding source) to prepare staff members to teach in fields with current or anticipated shortages?

- 107 1 Yes – Continue with 20b
2 No – Skip to 21

b. What are the fields for which this free training is provided?

Mark (X) all that apply.

- 108 1 Special education
109 2 Mathematics
110 3 Computer science
111 4 Physical sciences
112 5 Biological/life sciences
113 6 Bilingual education/ESL
114 7 Foreign languages
115 8 Other – Specify ↴

Remarks

SECTION B – DISTRICT POLICIES – Continued

Teacher Hiring And Retirement Policies

21. Which of the following criteria are used in SCREENING applicants for hiring in your district?

a. Full standard state certification for field to be taught.

- 116 1 Not used
 2 Used as criterion but not required
 3 Required for hiring

b. At least emergency or temporary state certification or endorsement for field to be taught.

- 117 1 Not used
 2 Used as criterion but not required
 3 Required for hiring

c. Graduation from a state approved teacher education program.

- 118 1 Not used
 2 Used as criterion but not required
 3 Required for hiring

d. College major or minor in field to be taught.

- 119 1 Not used
 2 Used as criterion but not required
 3 Required for hiring

e. Passage of a local DISTRICT test of basic skills or subject knowledge.

- 120 1 Not used
 2 Used as criterion but not required
 3 Required for hiring

f. Passage of a STATE test of basic skills.

- 121 1 Not used
 2 Used as criterion but not required
 3 Required for hiring

g. Passage of a STATE test of subject knowledge.

- 122 1 Not used
 2 Used as criterion but not required
 3 Required for hiring

h. Passage of the National Teachers Examination.

- 123 1 Not used
 2 Used as criterion but not required
 3 Required for hiring

22a. Are teachers in your district covered by a retirement plan?

- 124 1 Yes – Continue with 22b
 2 No – Skip to page 12

b. What is the minimum age at which a teacher can retire this year without penalty?

125 Age – Continue with 22c

- 126 1 No minimum age requirement – Skip to item 22d

c. What is the minimum number of years of service for retirement AT THIS AGE?

127 Years of service

- 128 1 No minimum service requirement } Skip to page 12

d. How many years of service are required for a teacher to retire without penalty?

129 Years

SECTION B – DISTRICT POLICIES – Continued

High School Graduation Requirements

If your district does not serve any of grades 10–12, mark (X) the box and skip to question 24. →

130

Does not serve any of grades 10–12 – Skip to item 24

23a. How many years of instruction are students in your district required to complete for high school graduation in each of the following subject areas? (Write in the number of years of instruction required for the graduating class of 1987 and the class of 1988. Record the number to the nearest tenth, e.g., 3.0, 2.5, etc. If none, mark the "None" box in the cell.)

Subject area (a)	Class of 1987 (b)	Class of 1988 (c)
1. English/language arts	131 _____ <input type="checkbox"/> None	132 _____ <input type="checkbox"/> None
2. Mathematics/ computer science	133 _____ <input type="checkbox"/> None	134 _____ <input type="checkbox"/> None
3. Social sciences, social studies (e.g., history, geography, economics)	135 _____ <input type="checkbox"/> None	136 _____ <input type="checkbox"/> None
4. Physical and biological sciences	137 _____ <input type="checkbox"/> None	138 _____ <input type="checkbox"/> None
5. Foreign language	139 _____ <input type="checkbox"/> None	140 _____ <input type="checkbox"/> None
6. Other – Specify →	141 _____ <input type="checkbox"/> None	142 _____ <input type="checkbox"/> None

b. Do the requirements for 1988 reflect a 3-year or a 4-year program?

143

3-year program
 4-year program
 Other -- Specify _____

Remarks

SECTION C – OTHER DISTRICT INFORMATION

24a. Are any students in your district eligible for ECIA Chapter 1 assistance?

- 144 1 Yes – Continue with 24b
2 No – Skip to 25a

b. How many students are eligible for Chapter 1 assistance?

145 Students

c. How many students receive Chapter 1 assistance?

146 Students
0 None

25a. Are any students in your district eligible for free or reduced price lunch programs?

- 147 1 Yes – Continue with 25b
2 No – Skip to 26

b. How many students are eligible for the special lunch programs?

148 Students

26. How many students in this district are –

a. American Indian or Alaskan Native?

149 Students
0 None

b. Asian or Pacific Islander?

150 Students
0 None

c. Hispanic, regardless of race (Mexican, Puerto Rican, Cuban, Central or South American, or other Hispanic culture or origin)?

151 Students
0 None

d. Black (not of Hispanic origin)?

152 Students
0 None

e. White (not of Hispanic origin)?

153 Students
0 None

27. How many teachers in this district are – (Record head counts, not FTE's.)

a. American Indian or Alaskan Native?

154 Teachers
0 None

b. Asian or Pacific Islander?

155 Teachers
0 None

c. Hispanic, regardless of race (Mexican, Puerto Rican, Cuban, Central or South American, or other Hispanic culture or origin)?

156 Teachers
0 None

d. Black (not of Hispanic origin)?

157 Teachers
0 None

e. White (not of Hispanic origin)?

158 Teachers
0 None

SECTION D – RESPONDENT INFORMATION

28. What is the title of the person primarily responsible for filling out this questionnaire?

Mark (X) only one box.

159

- 1 LEA/District Personnel Administrator
- 2 Curriculum Coordinator, Department Head
- 3 Teacher
- 4 Secretary
- 5 Other — Specify _____

29. Please enter the date you finish this survey. _____

Month

Day

Year

88

THIS COMPLETES THE QUESTIONNAIRE.

THANK YOU FOR ASSISTING US IN THIS IMPORTANT RESEARCH.

YOUR TIME AND EFFORT ARE MUCH APPRECIATED.

Return in the enclosed postage-paid envelope to:

**Bureau of the Census
Current Projects Branch
1201 East Tenth Street
Jeffersonville, IN 47132**

Appendix A-2

Differences between the Teacher Demand and Shortage Questionnaire for Public School Districts (LEAs) and the Teacher Demand and Shortage Questionnaire for Private Schools

1. The terms "district" and "school district" on the TDS public school district questionnaire are replaced by "school" on the private school TDS questionnaire.

2. The content of item 19 on the public school district TDS questionnaire is modified on the private school TDS questionnaire as follows:

19a. Does your school or organization use any of the pay incentives listed above to recruit or retain teachers to teach in fields of shortage?

- 1 Yes - Continue with 19b
- 2 No - Skip to 20a

b. Which of these pay incentives are offered to attract teachers to fields specified by your school as fields of shortage?

Mark (X) all that apply

- 1 Cash bonus
- 2 Different step on salary schedule
- 3 Other salary increase

c. In which fields are any of these incentives offered?

Mark (X) all that apply

- 1 Special education
 - 2 Mathematics
 - 3 Computer science
 - 4 Physical sciences
 - 5 Biological/life sciences
 - 6 Bilingual education/ESL
 - 7 Foreign languages
 - 8 Other - Specify
-

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FOURTH CLASS BOOK R.

