

# DATA BULLETIN

## FALL HIRING REPORT, 1998

For 11 of the past 12 years the Connecticut State Department of Education has surveyed local school districts to determine areas of teacher and administrator shortages. This Bulletin summarizes the data for 1998 and compares it to previous years. The data have been provided by all 166 local and regional school districts, the three endowed and incorporated academies, six regional educational service centers, 16 charter schools and the state vocational-technical school system.

Districts had 4,331 full- and part-time positions to fill for the fall of 1998. This marks an increase of 703 positions from the 1997-98 school year and the highest number of positions to fill in the past 10 years (see Table 1).

Over 13 percent of the vacant positions were part-time. Last year's part-time positions represented 17 percent of the positions to fill (see Table 1). Part-time positions were predominant in the subject areas of art (41 positions), English (43 positions), music (44 positions) and Spanish (41 positions). In 1997 the top four areas to have part-time positions were art (45 positions), music (64 positions), special education (54 positions) and Spanish (42 positions).

### October Vacancies

In October 1998 there was a total of 415 positions unfilled due to some special circumstance (see Table 1). Therefore, 90.4 percent of the positions to be filled were filled.

This is below the 10-year average and the largest number of October vacancies since these data were collected 11 years ago. Of the districts reporting an October vacancy, 60 percent claimed the special circumstance to be a late posting of the position.

Of the 415 October vacancies, 274 were unfilled because no qualified person could be found. This also marks the highest number since these data were collected. This represents 6.3 percent of the positions to fill, a two percent increase from last year. Just as last year, the top five subject areas with this type of vacancy were music (32 vacancies), special education (28 vacancies), media specialist (22 vacancies), speech and language pathologist (22 vacancies), and Spanish (21 vacancies).

### Full-time vs. Part-time Usage

Most (82.8%) of the 4,331 positions available were full time requiring a single endorsement, an increase of 3.4% over last year. Part-time single endorsements represented 12.7% of the positions available, a 4.1% decrease from last year. The remaining 4.5% of the positions available required dual endorsements (e.g., French and Spanish), either part time or full time. This is a slight increase over last year's percentage.

**Table 1. Fall Hiring Summary, 1987-1998**

<u>Fall of Year</u>	<u>Total Positions</u>	<u>Annual Positions To Fill</u>	<u>% Part-time of Positions To Fill</u>	<u>Percent Positions To Fill of Total</u>	<u>Vacancies Remaining in October</u>	<u>% of Annual Positions Filled</u>	<u>Vacancies Due to No Qualified Applicants</u>	<u>% Vacant: Not Qualified of Annual Positions</u>
1998	46,751	4331	13.4	9.3	415	90.4	274	6.3
1997	45,326	3630	17.1	8.0	274	92.5	151	4.2
1996	44,307				No Data Collected			
1995	43,261	2990	22.7	6.9	245	91.8	103	3.4
1994	42,451	2895	22.8	6.8	237	91.8	81	2.8
1993	41,324	2349	23.1	5.7	268	88.6	59	2.5
1992	41,179	2515	17.7	6.1	201	92.0	50	2.0
1991	41,733	1281	26.5	3.1	101	92.1	21	1.6
1990	42,397	1965	19.8	4.6	220	88.8	44	2.2
1989	42,176	2161	17.2	5.1	263	87.8	81	3.7
1988	42,335	2358	16.6	5.6	176	92.5	98	4.2
1987	41,724	2845	14.6	6.8	258	90.9	145	5.1
Averages	42,914	2665.5	19.2	6.2	241.6	90.8	100.6	3.5

A total of 193 positions required dual certification. The most common pairing was Spanish and French, which occurred 25 times. Other common pairings were two different sciences (e.g., biology and chemistry), English and social studies, math and science, and physical education and health.

Patterns of using part-time staff among ERGs were similar to the 1997-98 school year. The percentage of positions to fill that were part-time in ERG A was 20.2, compared to 2.9% in ERG I. The part-time usage decreases from ERG A to ERG I, with the exception of ERG E, in which 25.3 percent of the positions were part time.

### Applicant Quality Rating

The 1998-99 school year marked the second year that people responsible for hiring were asked to rate the quality of the applicant pool for each position. They were asked to consider academics, experience, recommendations, background and other factors to make this subjective rating. The ratings were made on the following scale.

- 1=Few or no minimally qualified applicants
- 2=Some acceptable applicants
- 3=Many acceptable applicants
- 4=Some high-quality applicants
- 5=Many high-quality applicants

Only the following three teaching areas received a median applicant pool rating of 4 or more: elementary, kindergarten and social studies (see Table 4). The applicant pools in 10 teaching areas received a median rating of 1: consumer home economics, French, industrial arts, integrated science, Latin, media specialist, physics, reading and language arts consultant, Spanish and vocational agriculture.

A total of 696 full- and part-time positions received an applicant pool rating of 1. This number has increased over last year's number of 538 positions. Four subject areas had over 50 percent of the positions available yield an applicant pool rating of 1 (see Table 2).

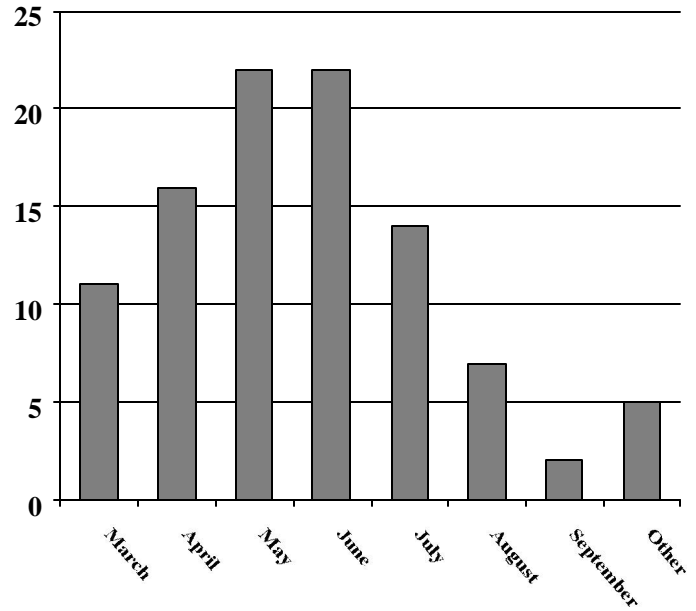
**Table 2. Subject Areas with 50% or more of Available Positions Yielding a Poor Applicant Pool Rating**

Subject	Total Positions Available	Positions Yielding an Applicant Pool Rating of 1	
		#	%
Consumer Home Economics	30	18	58.0
Industrial Arts	40	27	61.3
Spanish	175	94	56.2
Speech Pathologist	104	55	54.4

### Does the month a search began affect the quality of the applicant pool?

May and June tied for the month in which the majority of the searches began (see Figure 1). Comparing applicant ratings across the months that searches began does show an overall decline in median applicant ratings from March to September (see Table 3). The only exception is elementary, which shows consistent applicant pool ratings across months.

**Figure 1. Months in Which Searches Began (% of Positions)**



**Table 3. Median Applicant Rating in Relation to Month the Search Began, Selected Subjects**

Month	Elementary	General Science	Math	Music	Special Education
March	4.0	4.0	3.0	3.0	3.0
April	4.0	3.5	2.0	3.0	3.0
May	5.0	2.0	2.0	2.0	3.0
June	4.0	2.5	2.0	2.5	3.0
July	4.0	3.0	2.0	2.0	3.0
August	4.0	2.0	na	2.0	2.0
September	na	na	na	na	1.0
Other	4.0	na	na	1.0	2.0

### Shortage Areas

Connecticut takes several variables into account in order to determine areas of shortage (see Columns C-I of Table 4). "Vacancy No Qualified Person Found," is the number of full-time and part-time positions that were unfilled as of October 1 because no one had met a district's criteria after a complete

**Table 4. 1998-99 Hiring Statistics**

(A) Subject Area	(B) Total Vacancies	(C) Vacancy: No Qualified Person Found	(D) Durational Shortage Area Permit	(E) Minor Assignment	(F) Minimum Qualified Hire	(G) Median Applications	(H) 1st CT Certificates	(I) Median Applicant Quality Rating	(J) Shortage Rank
Art	82	1	1	0	6	19.0	174	3.0	29
Bilingual	59	5	0	0	8	15.5	92	2.0	20
Biology	67	1	1	1	5	19.0	198↑	3.0	33
Business & Office	48	4	0	0	16 ↑	9.0	79	2.0	10
Chemistry	37	2	0	3	10 ↑	10.0	62↑	2.0	18
Computer Education	26	3	NA	NA	10	12.0	260	2.0	23
Consumer Home Economics	30	4	2	1	14	3.0	26	1.0	2
Dance	1	0	NA	NA	0	3.0	NA	NA	47
Deaf	3	0	0	0	1	1.0↓	21↑	2.0	37
Developmental Reading	39 ↑	1	NA	NA	4	14.0	159↑	2.0	38
Distributive Education	1	0	0	0	0	2.0	13	NA	45
Drama/Theater	2	0	NA	NA	0	49.5	NA	NA	51
Earth Science	24	2	1	2	4	12.0	55↑	2.0	22
Elementary	987	2	0	2	3	75.0	3540	4.0	42
English	324 ↑	1	1	11	4	40.0	488	3.0	26
External GED	3	0	NA	NA	0	8.0	NA	NA	50
French	59	6	3	4	29 ↑	7.0	64↑	1.0	6
General Music	181	31 ↑	3	0	20 ↑	15.0	199	2.0	7
General Science	122 ↑	7	1	3	6 ↑	22.0	134↑	3.0	16
German	2	0	0	0	1	6.5	8↑	1.5	39
Gifted & Talented	27 ↑	3	NA	NA	4	8.0	3540	2.0	30
Health	49	2	1	12	7	10.0 ↓	102	2.0	14
Industrial Arts	40	6	11	11	18	4.0 ↓	40	1.0	3
Italian	6	0	0	2	2	7.5	11	1.5	31
Kindergarten/Pre-K	120 ↑	0	2	0	0	75.0	3047	4.0	49
Latin	12	1	1	2	6	5.0	9	1.0	12
Math Consultant	1	0	NA	NA	1	3.0	NA	NA	43
Mathematics	234	6	1	7	4	21.0	260	2.0	18
Media Specialist	95	22	6	1	21	10.0	69↑	2.0	5
Nurse-Teacher	3	0	0	0	0	8.0	5	NA	41
Other Language	1	0	5	0	0	2.0	21↑	NA	27
Occupational Subjects	3	0	NA	NA	0	1.0	NA	NA	46
Partially Sighted	1	1	0	0	0	1.0	4	NA	28
Physical Education	144	8 ↑	0	2	4	21.5	207	3.0	19
Physical Science	5	0	NA	NA	3	7.0 ↓	134↑	1.5	40
Physics	19	2	0	3	10 ↑	3.0	29	1.0	9
Reading Consultant	42	11	4	0	11	5.5 ↓	127↑	1.0	8
Remedial Reading	30	5	0	0	3	15.0	159↑	2.0	25
School Counselor	106	5	0	0	4	18.0	217	3.0	21
School Psychologist	91	6	1	0	11 ↑	13.0	121	2.0	11
School Social Worker	52	3	0	0	3	15.0	169	3.0	32
Skilled Trades	14 ↑	0	0	0	1	16.5 ↑	126	NA	48
Social Studies	196	0	1	15	2	50.0	525	4.0	36
Spanish	175	22 ↑	21	14	57 ↑	8.5	139	1.0	4
Special Education	484	25 ↑	3	0	9 ↑	40.0	754	3.0	16
Speech Pathologist	104	18	1	0	29	5.0	100	1.5	1
TESOL	11	1	1	1	4	12.5	71	2.0	34
Unlisted Non-Teaching	14	2	NA	NA	6	13.0	NA	1.0	35
Unlisted Teaching	18	0	NA	NA	3	8.0 ↓	NA	3.0	44
Vocational Related Subject	17	6	0	0	0	3.0 ↓	43	2.0	13
Vocational Agriculture	3	1	0	0	1	3.0 ↓	5	1.0	24

↑ Indicates an increase of 50% or more over 1997-98 data.  
↓ Indicates a decrease of 50% or more from 1997-98 data.

search. Teachers working under a “Durational Shortage Area Permit,” (Column D) must hold a bachelor’s degree, have at least 12 semester hours of credit in the area and meet the state’s basic skills testing requirement. Teachers working under a Temporary Authorization for Minor Assignment (Column E) must already be certified in another area and have at least six semester hours of credit in the subject to be taught. A “Minimum Qualified Hire,” (Column F) is the number of full-time and part-time positions that were filled from an applicant pool that was judged by school district personnel to

contain “Few or no minimally qualified applicants.” “Median Applications” (Column G) is the median number of applications that the district screened, from appropriately certified people, for any number of full- or part-time positions within a subject area. The maximum reportable number of applications was limited to 75.

The final variable, certificates issued per position, is calculated by dividing the number of teachers receiving or renewing 1998 first-level Connecticut certificates between

September 1, 1997, and August 31, 1998 (Column H), by the number of full- and part-time positions for which a district actively sought applicants or reviewed applications from existing files (Column B).

The overall ranking of shortage areas (Column J) is determined by the sum of three items:

- 1) the weighted sum of durational shortage permits, minor assignments and minimum qualified hires per position;
- 2) median applications; and
- 3) the number of 1<sup>st</sup> Connecticut certificates issued per position.

The five areas of greatest shortage in 1998-99 are speech and language pathologist, consumer home economics, industrial arts, Spanish and media specialist. These same subjects were the top five areas of shortage in 1997-98 as well.

Speech pathology has been the number one or two shortage area since these data were first gathered in 1987. Of the 104 positions that districts tried to fill in 1998, 18 were vacant because a qualified person could not be found and 29 positions were filled with people that districts felt came from a minimally qualified applicant pool. A position announcement in this area typically drew only five responses.

Industrial arts also has been in the top five shortage areas since 1987. Of the 40 industrial arts positions districts tried to fill in 1998, six were vacant because a qualified person could not be found and 18 positions were filled with people that districts felt came from a minimally qualified applicant pool.

Consumer home economics was also characterized by many positions either vacant or filled by minimally or underqualified people, few applicants and few new certificates. It is currently ranked the highest (2<sup>nd</sup>) it has ever been among shortage areas.

Spanish was the fourth ranked shortage area. It is characterized by many unfilled positions, and 57 out of the 175 positions available were filled with applicants from an applicant pool with less than full credentials.

Media specialist rounded out the top five shortage areas. Of the 69 advertised positions 22 (32%) went unfilled because a qualified person could not be found. It has been among the top five shortage areas five other times.

The top five shortage areas show from the 1997-98 to 1998-99 school year some increase in the number of people first certified (see Table 5). Spanish and media specialist, however, show significant increases in the number of vacancies because no qualified person was found (60% increase for media specialist and 77% increase for Spanish). The number of positions filled from a minimally qualified applicant pool also increased for Spanish and media specialist. From last year to this year there was a 90% increase for Spanish and a 320% increase for media specialist.

A subject area to watch in the future is music. In the span of only one year music has seen some dramatic changes. This year it is the 7<sup>th</sup> ranked teacher shortage area. There were 31 vacancies because no qualified person could be found, compared to 13 of this type of vacancy last year. Minimum qualified hires also increased significantly from 1997-98 to 1998-99. There were 20 positions filled that districts felt yielded a poor applicant pool, compared to five last year. While the quality of applicants appears to be declining, the number of people 1<sup>st</sup> certified in music increased from 137 in 1997 to 199 in 1998. The median applications received remained constant from 1997-98 to 1998-99.

The Connecticut State Department of Education sends a yearly proposal to Washington, D.C. to consider certain subjects as areas of shortage. As a result of the submittal of 1997-98 data, the Federal government approved Spanish, industrial arts, consumer home economics, and speech and language pathology as federally designated teacher shortage areas for the 1998-99 school year. This designation enables borrowers under the Stafford and Supplemental Loans for Students who teach in one of these areas to possibly qualify for a deferral of loan repayments. Holders of Paul Douglas Scholarships can reduce their teaching obligation from two years to one if they teach in an area of shortage. Perkins loan holders may qualify for full loan forgiveness if teaching in one of these shortage areas.

These federally designated shortage areas are not unique to Connecticut. Fifteen states share speech and language pathology as a shortage area while 10 states share Spanish. Of the 37 states that submitted shortage area proposals, Connecticut was the only one in which consumer home economics was a problem area. Other shortage areas shared by several states other than Connecticut include mathematics (14 states), English as a second language (12 states), special education (16 states) and bilingual education (11 states).

**Table 5. Top 5 Shortage Areas, 1997-98 to 1998-99 Comparison**

<u>Subject</u>	<u>Vacancies, No Qualified Person Found</u>		<u>Minimum Qualified Hires</u>		<u>1<sup>st</sup> CT Certificates</u>	
	<b>97-98</b>	<b>98-99</b>	<b>97-98</b>	<b>98-99</b>	<b>97-98</b>	<b>98-99</b>
Spanish	15	24	30	57	103	139
Consumer Home Economics	8	4	13	14	25	26
Industrial Arts	12	8	26	18	36	40
Speech Pathologist	21	22	27	29	59	100
Librarian/Media Specialist	13	23	5	21	46	69

