DATA BULLETIN

Bureau of Student Assessment and Research

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FALL HIRING REPORT, 2000

For the past 14 years the Connecticut State Department of Education has surveyed local school districts to determine areas of teacher shortage. This Bulletin summarizes the Fall Hiring Survey data for the 2000-2001 school year 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, the state vocational-technical school system and the state approved nonpublic special education schools.

Public school districts had 5,457 full- and part-time positions to fill for the fall of 2000. This is an increase of 164 positions from the 1999-00 school year and the highest number of positions to fill in the past 14 years (see Table 1). Nonpublic special education schools had 122 certified teaching vacancies to fill.

October Vacancies

While the 2000-01 school year did have the highest number of positions to fill, the increase in the number positions over last year is not as high as in previous years. There was an increase of 164 positions from 1999 to 2000 compared to an increase of 962 from 1998 to 1999. Of significance is the rate at which the vacancies due to no qualified applicants is increasing (see Table 1). From 1998 to 1999 there was an increase of 49 of this type of vacancy, yet from 1999 to 2000 this increase doubled to 99.

In October 2000 there was a total of 590 positions in the public schools unfilled due to some special circumstance (see Table 1). This figure represents the largest number of unfilled October vacancies since these data were collected 14 years ago.

Of these 590 October vacancies, 422 were unfilled due to a lack of qualified applicants. This is the highest number since these data were collected. The top five subject areas from both the public schools and the nonpublic special education schools, with a lack of qualified applicants were special education (96 vacancies), music (46 vacancies), math (28 vacancies), bilingual teacher (27 vacancies), and Spanish (19 vacancies).

Table 1. Fall Hiring Summary, 1987-2000, Public Schools Only

| Fall of Year | Total Positions | Annual Positions To Fill | % Part-time of Positions To Fill | Percent Positions To Fill of Total | Vacancies Remaining in October | % of Annual Positions Filled | Vacancies Due to No Qualified Applicants | %of Annual Positions Vacant, No Qualified Applicants |
|-----------------|--------------------|--------------------------|----------------------------------|------------------------------------|--------------------------------|------------------------------|--|--|
| 2000 | 48,899 | 5457 | 11.3 | 11.2 | 590 | 89.2 | 422 | 7.7 |
| 1999 | 47,793 | 5293 | 12.0 | 11.1 | 485 | 90.8 | 323 | 6.1 |
| 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 Collec | ted | | |
| 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 | 41,738 | 3082.3 | 18.1 | 6.9 | 287.2 | 90.7 | 142.5 | 4.0 |

¹ Education Reference Groups (ERGs) are a classification of the state's public school districts into groups based on similar socioeconomic status and need of the families with children in public schools. For more information about ERG classification a research bulletin is available at the State Department of Education's website at www.state.ct.us/sde/. Select the Division of Evaluation and Research and view data bulletins.

Public vs. Nonpublic

The nonpublic state-approved special education schools continue to have a more difficult time than the public school districts when it comes to filling their special education vacancies. Although nonpublic schools had fewer positions to fill (68) than public schools (617), a greater proportion of the nonpublic vacancies remained unfilled because a qualified person could not be found (36.8% in nonpublic vs. 11.5% in public, see Table 2). Public schools continue to report receiving a higher number of applications than the nonpublic schools, however, the applicant pool quality ratings do not significantly differ between public and nonpublic schools (see Table 2).

Applicant Quality Rating

District personnel responsible for hiring are asked to rate the quality of the applicant pool for each position. They are asked to consider academic qualifications, experience, recommendations, background and other factors to make this subjective rating. The ratings were made on the following scale, with the emphasis being placed on the quality, not the quantity, of the applicant pool:

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 four teaching areas received a median applicant pool rating of 4: elementary, middle grades social studies, school nurse teacher, and high school credit diploma program. No subject area received a median applicant pool rating of 5. Fifteen subject areas received a median rating of 1 (up from nine subject areas last year); they are: Spanish, French, Latin, other world language, elementary world language, bilingual, technology education, consumer home economics,

physics, reading and language arts consultant, deaf, partially sighted, blind, vocational agriculture, and marketing education. These subject areas represent 563 full- and part-time positions.

Shortage Areas

Connecticut takes several variables into account in order to determine areas of shortage (see Table 3, Columns C-I). "Vacancy No Qualified Person Found" (Column C), is the number of full-time and part-time positions that were unfilled as of October 1, 2000, because no individual had met a district's criteria after a complete 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 12 semester hours of credit in the subject to be taught. A "Minimum Qualified Hire" (Column F), is the number of full-time and parttime positions that were filled from an applicant pool that was judged by school district personnel to contain "Few or no minimally qualified applicants." 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 or renewed per position, is calculated by dividing the number of people receiving or renewing Connecticut certificates between September 1, 1999, and August 31, 2000 (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).

Table 2. Public and Non-Public Special Education Vacancies

| Subject Area | Number Positions Available | | Median Applications Received | | October Vacancies, No Qualified Person Found | | Median Applicant Pool Quality Rating | |
|---|----------------------------|--------|------------------------------|--------|--|--------|--------------------------------------|--------|
| | | Non- | | Non- | | Non- | | Non- |
| | Public | Public | Public | Public | Public | Public | Public | Public |
| General Special Education | 393 | 26 | 24.0 | 6.0 | 36 | 7 | 3.0 | 1.5 |
| Specific Learning Disabled | 117 | 10 | 30.0 | 26.5 | 14 | 0 | 3.0 | 3.5 |
| Socially Emotionally Disturbed | 59 | 30 | 18.5 | 5.0 | 15 | 17 | 2.0 | 2.0 |
| Mentally-Intellectually Handicapped | 20 | 0 | 47.0 | NA | 4 | 0 | 3.0 | NA |
| Physically Handicapped | 8 | 2 | 17.0 | NA | 2 | 1 | 4.0 | NA |
| Other Handicapped | 20 | 0 | 18.0 | 7.0 | 0 | 0 | 2.0 | 1.0 |
| Total Across All Special Education Areas | 617 | 68 | 25.0 | 6.0 | 71 | 25 | 3.0 | 2.0 |

Table 4. 2000-2001 Hiring Statistics

| Subject Area | Total Positions to Fill | Vacancy: No Qualified Person Found | Durational Shortage Area Permit | Minor Assignment | Minimum Qualified Hire | Median Applications | 1st CT Certificates | Median Applicant Quality Rating | Shortage Rank* |
|--|-------------------------|--|---------------------------------|---------------------|---------------------------|---------------------|------------------------|---------------------------------|-------------------|
| Art | 141 | 1 | 0 | 0 | 6 | 13.0 | 141 | 3.0 | 33 |
| Bilingual Teacher | 80 | 27 | 1 | 0 | 37 | 5.0 | 52 | 1.0 | 3 |
| Biology/Life Science | 91 | 6 | 15 | 2 | 18 | 10.0 | 181 | 2.0 | 18 |
| Blind | 3 | 0 | 1 | 0 | 2 | 1.0 | 7 | 1.0 | 44 |
| Business & Office | 54 | 9 | 8 | 0 | 15 | 8.0 | 76 | 2.0 | 12 |
| Chemistry | 61 | 7 | 8 | 3 | 17 | 7.0 | 77 | 2.0 | 17 |
| Computer Education | 27 | 2 | NA | NA | 12 | 5.0 | NA | 1.0 | NA |
| Consumer Home Economics | 45 | 9 | 11 | 2 | 24 | 2.5 | 20 | 1.0 | 10 |
| Deaf | 15 | 3 | 0 | 0 | 4 | 3.0 | 20 | 1.0 | 30 |
| Developmental Reading | 37 | 4 | NA | NA | 9 | 9.0 | NA | 2.0 | NA 27 |
| Earth Science | 1300 | 1 9 | 0 | 0 | 7 | 10.0 | 46 | 2.0 | 37 23 |
| Elementary Teacher Elementary World Language | 22 | 2 | 1 | 0 | 6 | 75.0 4.0 | 2423 45 | 1.0 | 32 |
| English | 248 | 18 | 9 | 3 | 9 | 20.0 | 374 | 3.0 | 11 |
| French | 60 | 7 | 8 | 8 | 23 | 7.0 | 59 | 1.0 | 14 |
| General Science | 67 | 4 | 18 | 10 | 13 | 9.0 | 120 | 2.0 | 22 |
| General Special Education | 685 | 96 | 33 | 0 | 18 | 20.0 | 690 | 2.0 | 4 |
| German German | 1 | 0 | 1 | 0 | 0 | 3.0 | 9 | 2.0 | 49 |
| Gifted and Talented | 27 | 2 | NA | NA NA | 4 | 5.5 | NA | 2.0 | NA |
| Health | 74 | 5 | 6 | 14 | 14 | 9.5 | 84 | 2.0 | 21 |
| High School Credit Diploma Program | 2 | 0 | 0 | 0 | 0 | 17.0 | 37 | 4.0 | 50 |
| Integrated Language Arts | 22 | 0 | NA | NA | 3 | 25.0 | NA | 3.0 | NA |
| Integrated Science | 5 | 0 | NA | NA | 1 | 13.0 | NA | 2.5 | NA |
| Italian | 9 | 0 | 1 | 0 | 4 | 1.5 | 13 | 1.5 | 41 |
| Kindergarten/Pre-K | 163 | 2 | 0 | 0 | 6 | 34.0 | 772 | 3.5 | 35 |
| Latin | 23 | 3 | 8 | 1 | 8 | 3.0 | 14 | 1.0 | 25 |
| Marketing and Distribution | 3 | 0 | 0 | 0 | 1 | 2.0 | 12 | 1.0 | 48 |
| Mathematics | 252 | 17 | 34 | 3 | 47 | 12.0 | 213 | 2.0 | 5 |
| Media Specialist | 93 | 12 | 23 | 0 | 30 | 9.0 | 62 | 2.0 | 8 |
| Middle Grades, Biology | 9 | 1 | 0 | 0 | 4 | 8.5 | 187 | 1.5 | 42 |
| Middle Grades, Earth Science | 11 | 2 | 0 | 0 | 1 | 15.5 | 50 | 2.0 | 39 |
| Middle Grades, English | 128 | 3 | 2 | 2 | 4 | 23.0 | 420 | 3.0 | 31 |
| Middle Grades, French | 25 | 3 | NA | NA | 5 | 8.5 | NA | 2.5 | NA |
| Middle Grades, General Science | 91 | 3 | 0 | 0 | 11 | 12.0 | 139 | 2.0 | 29 |
| Middle Grades, Italian | 4 | 0 | NA | NA | 4 | 2.0 | NA | 1.0 | NA |
| Middle Grades, Latin | 5 | 0 | NA 7 | NA | 1 | 2.0 | NA 244 | 2.0 | NA 15 |
| Middle Grades, Mathematics | 145 | 11 | 7 | 0 | 14 | 13.0 | 244 | 2.0 | 15 |
| Middle Grades, Other Language Middle Grades, Physical Science | 5 | 1 | NA NA | NA NA | 1 | 0.5 4.0 | NA NA | 3.0 | NA NA |
| Middle Grades, Physical Science Middle Grades, Social Studies | 101 | 1 | NA 2 | NA 1 | 2 | 32.0 | NA 498 | 4.0 | 43 |
| Middle Grades, Social Studies Middle Grades, Spanish | 84 | 8 | NA | NA | 34 | 7.0 | NA | 2.0 | NA |
| Music | 247 | 46 | 15 | 0 | 40 | 8.0 | 154 | 2.0 | 1 |
| Occupational Home Economics | 3 | 2 | 0 | 0 | 0 | 2.5 | 3 | 1.5 | 36 |
| Other Language | 6 | 4 | 0 | 0 | 2 | 0.5 | 8 | 1.0 | 28 |
| Other Occupational Subject | 8 | 0 | 0 | 0 | 4 | 5.0 | 104 | 1.5 | 46 |
| Partially Sighted | 2 | 1 | 0 | 0 | i | 0.0 | 8 | 1.0 | 40 |
| Physical Education | 189 | 8 | 1 | 0 | 19 | 12.5 | 218 | 3.0 | 19 |
| Physical Science | 13 | 1 | NA | NA | 0 | 9.5 | NA | 2.0 | NA |
| Physics | 31 | 5 | 5 | 1 | 9 | 4.0 | 37 | 1.0 | 24 |
| Psychological Examiner | 3 | 0 | NA | NA | 0 | 12.0 | NA | 2.5 | NA |
| Reading and Language Arts Consultant | 37 | 4 | 6 | 0 | 9 | 4.5 | 47 | 1.0 | 26 |
| Related Subjects (Voc-Tech Only) | 4 | 0 | 0 | 0 | 0 | 74.0 | 56 | 2.0 | 51 |
| Remedial Mathematics | 1 | 0 | NA | NA | 0 | 40.0 | NA | 2.0 | NA |
| Remedial Reading/Language Arts | 60 | 15 | 9 | 0 | 15 | 6.0 | 55 | 2.0 | 9 |
| School Counselor | 163 | 12 | 10 | 0 | 9 | 15.0 | 168 | 2.0 | 13 |
| School Nurse-Teacher | 9 | 0 | 0 | 0 | 1 | 13.0 | 7 | 4.5 | 47 |
| School Psychologist | 119 | 11 | 1 | 0 | 12 | 8.0 | 122 | 2.0 | 16 |
| School Social Worker | 76 | 2 | 0 | 0 | 0 | 11.5 | 196 | 2.0 | 38 |
| Social Studies | 129 | 0 | 1 | 9 | 3 | 37.0 | 425 | 3.0 | 45 |
| Spanish | 107 | 11 | 46 | 12 | 82 | 6.5 | 152 | 1.0 | 2 |
| Speech & Language Pathologist | 117 | 18 | 1 | 0 | 25 | 5.0 | 112 | 2.0 | 7 |
| Technology Education | 63 | 14 | 17 | 0 | 30 | 5.0 | 29 | 1.0 | 6 |
| TESOL | 28 | 4 | 5 | 0 | 6 | 8.0 | 63 | 2.0 | 27 |
| Theater/Drama | 1 70 | 0 | NA | NA | 0 | 1.0 | NA 10 | 1.0 | NA 20 |
| Trade & Industrial | 58 | 16 | 0 | 0 | 0 | 4.0 | 18 | 3.0 | 20 |
| Unlisted Non-Teaching Assignment | 14 | 2 | NA | NA | 6 | 5.0 | NA | 2.0 | NA |
| | 13 | 0 | NA | NA | 4 | 2.0 | NA | 2.0 | NA |
| Unlisted Teaching Assignment Video/Film | 1 | 1 | NA | NA | 0 | 2.0 | NA | 1.0 | NA |

^{* &}quot;NA" indicates that certification does not currently exist for that subject area. Because of this, a shortage area index could not be calculated. The numbers associated with these non-certifiable subject areas were factored into their respective certifiable areas (e.g., Middle Grades Spanish into regular Spanish). Therefore, the shortage area ranking assigned to areas such as Spanish and French reflect the numbers associated with their related non-certifiable areas.

Using 1999-2000 school year data, the designated shortage areas for the 2000-2001 school year were determined by the sum of four items:

- 1) the number of vacancies because no qualified person was found;
- the weighted sum of the number of durational shortage area permits, the number of minor assignments, the number of long-term substitutes and the number of minimum qualified hires per position;
- 3) median applications weighted 25%; and
- 4) the number of first Connecticut certificates issued or renewed per position, also weighted 25%.

Designation of Shortage Areas

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 submittal of 1999-2000 data, the federal government approved special education, music, bilingual education, mathematics, Spanish, and technology education as federally designated teacher shortage areas for the 2000-2001 school year. This designation enables borrowers under the Stafford and Supplemental Loans for Students programs, who teach in one of these areas, to possibly qualify for a deferral of loan repayments. Perkins loan holders may qualify for full loan forgiveness if teaching in one of these shortage areas.

For the first time Connecticut has also designated shortage areas. In the past, the only certification came from the U.S. Department of Education. Connecticut's designation of shortage areas was in response to a new mortgage assistance program administered by the Connecticut Housing Finance Authority (CHFA). The program enables teachers who teach in a priority or transitional school district or who teach in a state-identified subject matter shortage area to qualify for mortgage assistance. In the case of certified teachers employed by a priority or transitional school district, the teacher's residence must be located in that district.

Teachers who teach in a state-identified subject matter shortage area are able to purchase statewide. This program is available to first-time homebuyers only and is subject to CHFA eligibility requirements. The mortgage assistance program was created to serve as a tool to assist in recruiting and retaining public school teachers in Connecticut.

The state identified shortage areas for the 2000-2001 school year were: media specialist, special education, music, bilingual education, mathematics, Spanish, and technology education (the same federally designated shortage areas with the exception of media specialist).

For the past several years the subject areas designated as shortages have been difficult positions to fill (see Table 4). Music, bilingual education, special education and technology education show a general increase in the number of positions remaining vacant because a qualified person could not be found. With initiatives such as the mortgage assistance program and the federal loan deferment program Connecticut will hopefully begin to see these numbers decrease.

Based on 2000-2001 school year data, the state identified shortage areas for the 2001-2002 school year will be:

- music, PreK-12
- bilingual education, PreK-12
- special education, 1-12
- mathematics, 7-12
- technology education, PreK-12
- Spanish, 7-12
- library media specialist, PreK-12
- remedial reading, 1-12
- speech and language pathologist (no grades)

With the exception of library media specialist, these subject areas will also be submitted to the U.S. Department of Education this fall for federal designation as teacher shortage areas.

Table 4. Positions Available in the Shortage Areas, 1997-2000

| | | # Positions | Available | | # Positions Remaining Vacant, No Qualified Person Found | | | | |
|----------------------|-------|-------------|-----------|-------|--|-------|-------|-------|--|
| Subject | 97-98 | 98-99 | 99-00 | 00-01 | 97-98 | 98-99 | 99-00 | 00-01 | |
| Music | 157 | 181 | 219 | 247 | 13 | 31 | 32 | 46 | |
| Spanish | 153 | 175 | 196 | 191 | 16 | 22 | 17 | 11 | |
| Bilingual | 46 | 59 | 69 | 71 | 7 | 5 | 25 | 27 | |
| Mathematics | 186 | 234 | 314 | 397 | 1 | 6 | 27 | 17 | |
| Special Education | 400 | 484 | 740 | 685 | 8 | 25 | 83 | 96 | |
| Media Specialist | 62 | 95 | 98 | 93 | 13 | 22 | 23 | 12 | |
| Technology Education | 62 | 40 | 49 | 63 | 10 | 6 | 9 | 14 | |