DOCUMENT RESUME

ED 315 403 SP 031 942

TITLE Fall Hiring Report. Certified Professional Staff

Vacancies as of September 1, 1988.

INSTITUTION Connecticut State Dept. of Education, Hartford.

PUB DATE 89

NOTE 29p.; For the 1987 report, see ED 299 255.

PUB TYPE Reports - Descriptive (141) -- Statistical Data (110)

-- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC02 Plus Postage.

DESCRIPTORS Elementary Secondary Education; *Employment Patterns;

Intellectual Disciplines; *Labor Market; *Teacher Employment; Teacher Recruitment; *Teacher Shortage;

*Teacher Supply and Demand

IDENTIFIERS *Connecticut

ABSTRACT

- 발**사** 기계 (1917년) 대한

> A teacher shortage survey was conducted in the fall of the 1988-89 school year in Connecticut to determine whether a critical shortage of teachers exists in particular areas of certification. Determination of shortage areas is based on the number of teacher vacancies, new certificates issued by the Department of Education during the previous year, and the number and types of classes being taught by persons without the appropriate certification. Analyses of individual positions and position categories with reference to the number of school districts with vacancies provide detailed information on the possible existence of teacher shortages. The most precise estimate of teacher shortages in the report is made through the calculation of a teacher shortage index. This index is a relative indicator of a teacher shortage which is used to identify areas with a greater need for teachers than other areas. The greatest number of school districts reported full-time vacancies in the following areas: (1) elementary education; (2) teachers of the learning disabled; (3) English; (4) music; and (5) speech and hearing. Four appendices include the 1988 teacher shortage survey (statewide vacancies and certified applicants by position, subject area shortage evaluation, and Form ED-156) and the 1988-89 teacher shortage index. (JD)

Reproductions supplied by EDRS are the best that can be made from the original document.

FALL HIRING REPORT

Certified Professional Staff Vacancies As of September 1, 1988

> "PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.

 Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

STATE OF CONNECTICUT

DEPARTMENT OF EDUCATION — 1989



State of Connecticut

William A. O'Neill, Governor

Board of Education

Abraham Glassman, Chairperson Rita L. Hendel, Vice Chairperson George T. Carofino A. Walter Esdaile Warren J. Foley Beverly P. Greenberg Lucas Isidro John F. Malinix Julia S. Rankin

Norma Foreman Glasgow (ex officio) Commissioner of Higher Education

Gerald N. Tirozzi Commissioner of Education

Frank A. Altieri
Deputy Commissioner
Finance and Operations

Scott Brohinsky
Deputy Commissioner
Program and Support Services



FALL HIRING REPORT

Certified Professional Staff Vacancies As of September 1, 1988



CONTENTS

V	PREFACE
vii	HIGHLIGHTS
1	PRELIMINARY SHORTAGE ANALYSIS
1	Statewide Analysis
2	Individual Positions
4	Position Groups
2 4 5 8 9	TEACHER SHORTAGE INDEX
8	DISTRICT RECRUITING PRACTICES
ğ	SUMMARY AND CONCLUSIONS
10	POLICY IMPLICATIONS
	Tables
	Table 1. Number of Districts Reporting
2	at Least One Full-Time Vacancy
3	Table 2. Median Applications Per District
	Table 3. Areas With Greatest Lack of Qualified Persons
4	for Districts Reporting Full-Time Vacancies
5 7	Table 4. Shortage Areas by Position Category
7	Table 5. Teacher Shortage Index, 1988-89
	Appendices
	Appendix A. Teacher Shortage Survey - 1988, Statewide
13	Vacancies and Certified Applicants by Position
, ,	Appendix B. Teacher Shortage Survey - 1988, Subject Area
15	Shortage Evaluation
17	Appendix C. Teacher Shortage Index 1988-89
18	Appendix D. Form ED-156, Teacher Shortage Survey
	The second of the second second of the secon



In accordance with Section 10a-163 of the Connecticut General Statutes, a teacher shortage survey was conducted in the fall of the 1988-89 school year to determine whether a critical shortage of teachers exists in particular areas of certification. Section 10a-163 mandates the state Department of Education to identify the fields with the greatest shortage of teachers. Determination of shortage areas is to be based on, but not limited to, the number of teacher vacancies, new certificates issued by the state Department of Education during the previous year, and the number and types of classes being taught by persons without the appropriate certification.

Data were collected to represent hiring in all 166 local and regional public school districts, three endowed and incorporated academies, six regional educational service centers, three unified school districts, and the vocational-technical schools. Form ED-156, Teacher Shortage Survey (see Appendix D), was used for this purpose. Since staff members are hired for the vocational-technical schools through a central office, the data are reported collectively. Similarly, some regional school districts reported their hiring data for all the schools in the district. Hence, every school district is not represented individually.

This was the second year that form ED-156 was used to account for the possible existence of teacher shortages. Two modifications were made to the initial form. Bilingual education was added to the list of subject areas. Also, a brief checklist item was added to the survey form to gain some preliminary indication of the nature and extent of district recruiting practices. The checklist included categories related to advertisements in newspapers, registration with college and university placement offices, attendance at college and university job fairs, and a category to account for any other recruitment practices. All except the last category were included twice to differentiate between in-state and out-of-state recruiting activities.

Comparable to the previous year, positions requiring teacher certification and administrative positions were included on the survey. Information was requested on the number of vacancies for each area of certification and each administrative position. Positions that were not advertised or that were filled internally were not reported and are therefore not included in the totals. Internally filled positions did not contribute to the identification of shortage areas since a search was not conducted. Positions were also excluded if the application process was incomplete, most likely due to late resignations. If no applications were received for a position it could not be determined whether a qualified applicant was available. Incomplete hiring was indicated on the survey form by the responding district.

The number of applications screened from appropriately certified applicants was also requested. This item was designed to represent the number of applications screened which formed the basis for a total interview



pool. It does not simply represent the number of applicants interviewed for the available positions. Numerous telephone calls were made to verify all questionable data. Lastly, the number of remaining vacancies as of September 1, as well as September 1 vacancies attributed to the lack of a qualified person, were requested.

Comparable to the previous year, the median was used to describe the application data. The median describes the typical number of applications screened and is not affected by extreme cases. Also, the maximum number of applications was used as a lower limit of an unduplicated count for a particular position. The number of applications per position does not represent a unique pool of applicants since a prospective teacher or administrator can apply for a position in more than one district. The median and maximum number of applications are used to describe the available teacher shortage data.

The report that follows addresses whether a teacher shortage existed in Connecticut for the 1988-89 school year. Multiple analyses were used for this purpose. A general overview is provided through a statewide analysis of the available data. Since this analysis is based on totals summed across all positions, the results provide a general indication of the nature of a teacher shortage in the state. It is included to alert the reader to the dangers of drawing a conclusion from a general summary analysis. Analyses of individual positions and position categories with reference to the number of school districts with vacancies provide more detailed information on the possible existence of teacher shortages. The most precise estimate of teacher shortages in this report for the state of Connecticut is made through the calculation of a teacher shortage index. This index is a relative indicator of a teacher shortage which is used to identify areas with a greater need for teachers than other areas. The index alone does not suggest that a true shortage exists. Rather, it suggests that some positions are more difficult to fill relative to the other positions.

Collectively, these results should make it possible to identify teacher shortage areas, if any, for the 1988-89 school year. Since two years of data are now available, comparisons are made where appropriate. Information on district recruiting is then discussed. Finally, a section on conclusions and policy implications is included to summarize the major issues.

- The calculation of a teacher shortage index identified speech and hearing, industrial arts, home economics, school psychologist, special education and media specialist as the areas of greatest shortage for the 1988-89 school year (see Table 5 and Appendix C).
- O History/social studies, history, and intermediate administration were identified as the areas of lowest teacher shortage for the 1988-89 school year (see Table 5 and Appendix C). Math and science were not shortage areas for the 1988-89 school year (see p. 5 and Appendix C).
- O Speech and hearing and special education ranked the highest on the teacher qualification component of the teacher shortage index. The lack of qualified teachers was greatest for these areas (see p. 7).
- o As of September 1, 129 full-time vacancies remained for 29 different teacher and administrative positions due to the lack of qualified applicants (see p. 1 and Appendix A).
- The greatest number of school districts reported full-time vacancies in the following areas: elementary education (114), teachers of the learning disabled (81), English (46), music (45) and speech and hearing (43) (see Table 1 and Appendix 8).
- The fewest number of school districts reported full-time vacancies in the following areas: Italian (1), Latin (1), marketing (1) and sociology (1) (see Table 1 and Appendix B).
- o For administrator positions, 37 districts reported at least one full-time vacancy for a vice principal (see Appendix B).
- The areas receiving the fewest number of applicants per district included speech and hearing, and industrial arts (median=5), as well as home economics, nurse-teachers and computer educators (median=6) (see Table 2).
- o Districts reporting full-time vacancies identified the greatest lack of qualified persons for school business officials, teachers of the physically handicapped, school social worker, speech and hearing, and media specialist positions. Collectively, these positions accounted for half of the full-time vacancies which existed as of September 1 (see Table 3 and Appendix B).
- The use of a particular recruiting strategy by districts varied extensively. Advertising in Connecticut newspapers and attendance at out-of-state job fairs were the two most popular recruiting practices for the 1988-89 school year (see p. 8).



The Teacher Shortage Survey was distributed to all 166 local and regional public school districts, six regional educational service centers (RESCs), three endowed and incorporated academies, the vocational-technical school central office, and three unified school districts in Connecticut, in compliance with Section 10a-163 of the state statutes. The results of the survey presented in this report are representative of the above district types. The data for the elementary schools within Regional School Districts 1, 4 and 8 were aggregated and reported by the respective regional school district. Data from the 17 vocational-technical schools were also reported by the central office and therefore are in an aggregated form. Five public school districts (Colebrook, Franklin, Glastonbury, New Hartford and Woodbridge) reported no advertised positions for the 1988-89 school year. They are not included in any analysis. For the purpose of this report all educational units are collectively referred to as districts. More specific distinctions are made where necessary.

Statewide Analysis. Prior to the beginning of the 1988-89 school year, a total of 1,966 full-time and 392 part-time teacher and administrator vacancies were advertised by Connecticut school districts (see Appendix A). In response to the advertised positions, an application from an appropriately certified candidate was supposed to be reported if it was submitted for consideration or drawn from an active file that was less than two years old. For the advertised positions, approximately 33,649 applications from appropriately certified candidates were screened (see Appendix A). For the 1987-88 school year, 2,492 full-time and 416 part-time vacancies were advertised. Approximately 38,706 applications were screened.

Only a few of the full-time advertised positions, 129 (6.6%), were unfilled as of September 1. Of these positions, 69 were not filled because a qualified applicant was not found. Hence, 3.5 percent of all the advertised positions and 53.5 percent of the September 1 vacancies were attributed to the lack of qualified applicants. During the 1987-88 hiring period, 217 of 2,429 (8.9%) positions were unfilled as of September 1 and 117 were attributed to the lack of a qualified applicant. That year, a qualified applicant was not found for 4.8 percent of all advertised vacancies and 53.9 percent of the September 1 vacancies.

Part-time positions seemed more difficult to fill. A total of 47 (12.0%) of the advertised part-time positions remained vacant as of September 1. Moreover, 29 (7.4%) of all advertised part-time vacancies were attributed to the lack of a qualified applicant (see Appendix A). Ideally, the number of September 1 vacancies and those attributed to the lack of qualified applicants should be equal. This does not occur since it is possible for a district to have received many applications from qualified applicants. However, if a person was not hired by September 1, the vacancy was reported but it was not attributed to the lack of a qualified applicant.



Individual Positions. Teacher shortage areas were investigated through an analysis of individual areas of certification or positions. The vacancies reported by a district were included if a minimum of one full-time vacancy existed. Part-time vacancies were not included in this analysis since they represent a different type of hiring procedure for the district and a different type of career opportunity for prospective candidates.

for the 1988-89 school year, 162 of 179 districts reported at least one advertised full-time vacancy. A total of 56 of the 61 different teacher and administrator positions listed on the survey were represented. The greatest number of districts, 114, reported 511 advertised full-time elementary education positions. Other advertised positions reported by many districts include English, music and two areas of special education. All these positions were similarly identified last year. The positions with the least number of full-time vacancies included two foreign languages, marketing and sociology. Only one district reported one full-time vacancy for each of these (see Table 1). Two districts reported at least one full-time vacancy in adult ESOL, deaf education, German and vocationally related subjects. In the sciences, the greatest number of districts with full-time vacancies, 20, were reported for general science while the fewest, 4, were reported for Similar to last year, administrator vacancies were greatest for physics. vice principals. A total of 37 districts reported at least one full-time vacancy for this position (see Appendix B).

Table 1 Number of Districts Reporting at Least One Full-Time Vacancy

Highest	Districts (Vacancies)	Lowest	Districts (Vacancies)
Elementary Education Learning Disabled English Music Speech and Hearing	114 (511) 81 (152) 46 (79) 45 (63) 43 (70)	Italian Latin Marketing Sociology	7 (1) 7 (1) 1 (1) 1 (1)

The median or typical number of applications reviewed per district for the available positions varied widely. Based on a minimum of three districts and four vacancies per position, the typical district reviewed 80 applications for the advertised elementary education teaching positions compared to 100 for the previous year. High numbers of applications were also reviewed by districts for history/social studies and three types of administrative positions. Positions with the lowest number of applications reviewed per district included industrial arts, speech and hearing, home

economics, nursa-teacher and computer education (see Table 2). Speech and hearing, home economics, industrial arts and nurse-teacher were similarly identified in 1987-88. In the sciences and mathematics, the typical school district reviewed 10 or more applications for each subject (see Appendix B).

			Table 2
Median	Applications	per	District

Highest	Lowest					
Elementary Education	80	Industrial Arts	5			
Asst. Superintendent	60	Speech and Hearing	5			
Superintendent	50	Home Economics	6			
Principal	34	Nurse-Teacher	6			
History/Social Studies	26	Computer Education	6			

Individually, neither the number of vacancies nor the median number of applications screened specifies possible shortage areas. However, more useful information is gained when the two statistics are compared for each position. A large number of advertised elementary education positions was reported, as was a correspondingly high median number of applications. Thus, elementary education can be considered a low shortage area. In contrast, a high number of vacancies was reported for speech and hearing teachers, as was a low median number of applications. Hence, speech and hearing can be considered a high shortage area. Conclusions about the other positions listed in Tables 1 and 2 are not as distinct.

Another approach to identifying shortage areas is to examine the proportion of districts which cannot find a qualified person with reference to the median number of applications reviewed. Most of the districts which reported vacancies were able to fill them. Districts reported full-time vacancies in 56 teacher and administrator position types. Qualified teachers and administrators were found for 33 of these areas. Qualified applicants were not found for the remaining 23 teacher and administrator areas.

The percentage of districts which could not find a qualified person ranged from two percent for teachers of the learning disabled to 33 percent for school business officials. The five most difficult positions included two special education areas, two support staff areas and one intermediate administrative position. Two of the five positions (speech and hearing, and media specialist) were similarly identified last year.

The median number of applications per district was lowest for speech and hearing teachers (5) and highest for school business officials (12). These two areas, plus teachers of the physically handicapped, school social workers and media specialists, accounted for approximately half of the vacancies which were attributed to the lack of qualified persons (see Table

3). In the previous year, the five identified areas accounted for more than 75 percent of the vacancies due to the lack of qualified applicants. While these areas remain difficult to fill with qualified applicants, they represent a smaller percentage of all positions that were vacant due to the lack of qualified applicants. This suggests that there was a greater variety of positions that were difficult to fill in 1988-89. This does not suggest there was a massive teacher shortage.

Table 3
Areas With Greatest Lack of Qualified Persons for Districts Reporting Full-Time Vacancies

Pos ition	Districts: Full-Time Vacancies	Districts: No Qualified Person Found	Percent No Qualified Person Found	Applica Per Dis Median	
School Business Off. Teachers of the	9	3	33	12	25
Physically Hndcp.	4	1	25	8	10
School Social Worker	21	4	19	10	45
Speech and Hearing	43	8	19	5	22
Media Specialist	28	5	18	7	30

Position Groups. To determine whether teacher shortages were more prominent in certain subject categories, the positions listed on the survey form were grouped into 13 categories. Ten categories were largely based on teacher positions that represent the categories of skills and competencies developed in <u>Connecticut's Common Core of Learning</u> (Connecticut State Board of Education, 1987). Support staff and administrator categories correspond to those reported in the annual <u>School Staff Report</u>. The district counts reported in this section represent unduplicated counts. Districts which reported vacancies in more than one position in a category are represented once in this section.

elementary and kindergarten/prekindergarten comprised elementary group. Arts consisted of art and music positions. Career and vocations included agriculture, business and office education, economics, industrial arts, marketing, related subjects, occupational subjects and skilled trades. History and social sciences included history, history/social studies, psychology and sociology. English was comprised solely of English. Math and science consisted of mathematics, the sciences, and computer education. Physical health and development included health, physical education and driver education. Other exceptionalities consisted of blind education, deaf education, partially sighted, speech and hearing, gifted and talented and adult ESOL. Support staff included media specialist, reading consultant, guidance counselor, dental hygienist, nurse-teacher, school psychologist and school social worker. Foreign languages, special education and administration groupings were based on the

structure of the survey form. Bilingual education was kept as a separate category (see Appendix A).

Districts which reported full-time vacancies varied extensively for the 13 position groups. Six districts reported at least one full-time vacancy in bilingual education. By comparison, 115 districts reported a full-time vacancy in elementary education and 112 districts reported at least one full-time vacancy in special education (see Table 4). In 1987-88 a total of 107 districts reported vacancies in special education.

Similar to last year, the typical school district received the fewest applications for other exceptionalities, career and vocations, support staff and foreign languages. Of these position categories, at least one district was unable to find a qualified person to fill the vacancy. Overall, every teaching position that corresponds to the core subject areas required for high school graduation was filled. All districts with advertised vacancies filled the available positions by September 1. Finally, although the typical district reviewed a relatively moderate number of applications for administrator positions, four districts were unable to find a qualified person by September 1 (see Table 4).

Table 4 Shortage Areas by Position Category

	Districts: Full-Time	Districts: No Qualified	Percent No Qualified	Applications <pre>Per District</pre>		
Position Category	Vacancies	Person Found	Person Found	<u>Median</u>	Max	
Bilingual Education	6	1	17	11	150	
Other Exceptionalities	59	8	14	6	33	
Support Staff	90	13	14	8	60	
Career and Vocations	49	5	10	6	35	
Special Education	112	8	7	10	200	
Administration	74	4	5	23	178	
Foreign Languages	29	1	3	8	30	
Elementary Education	115	0	0	64	1000	
Arts	62	0	0	15	50	
Math and Science	68	0	0	12	75	
English	48	0	0	20	100	
Physical Health	40	0	0	12	57	
Social Science	34	0	0	22	117	

TEACHER SHORTAGE INDEX

A teacher shortage index was calculated to more accurately identify five areas of relative teacher shortage in accordance with Section 10a-163 of the Connecticut General Statutes. The index contains three factors: teacher



AND THE PARTY

qualification, application rate and potential pool of teachers. The index is relative since it does not identify absolute teacher shortages. Rather, it is used to identify areas with a greater need for teachers than the other areas. For this reason, index values cannot be compared from year to year. However, relative ranks can be compared. To include all the data required by the statutes, it was necessary to combine special education areas into one category. Similarly, administrative areas, except for school business officials and superintendents, were combined to form the intermediate administrator category.

The first component of the teacher shortage index is a teacher qualification factor. One part of this factor consists of the total number of full-time and part-time vacancies due to the lack of a qualified person. The qualification factor also contains the number of temporary emergency permits (TEP) and temporary authorizations for minor assignments. Temporary permits and authorizations are issued if a need exists. They represent a level of underqualification for a position. Since each factor was not considered to be of equal importance, they were weighted differently. Total vacancies were assigned a weight of one while temporary emergency permits and minor assignments were assigned weights of 0.8 and 0.2, respectively. Only those subject areas with an unfilled position or a position filled with an underqualified candidate were further evaluated to identify shortage areas.

The second component of the teacher shortage index represents the application rate for each position type. This component consists solely of the median number of applications per district. The median was multiplied by negative one so that a high median number of applications represented a low shortage area while a low median represented a high area of teacher shortage.

The third component of the teacher shortage index accounted for the potential pool of teachers. This component consisted of the total number of vacancies for each position divided by the total number of provisional certificates issued between September 1, 1987, and August 31, 1988. Provisional certificates are awarded to teachers who are qualified to teach in Connecticut. A high ratio is indicative of a small pool of potential applicants compared to the available positions and, therefore, high teacher shortage. Conversely, a low ratio is indicative of a large pool of applicants compared to the available positions and, therefore, low teacher shortage.

The calculation of the final teacher shortage index is based on the sum of the ranks of each component. Each individual component was ranked from 1 to 31, with 31 representing the area of greatest relative shortage and 1 representing the area with the least relative shortage. The three ranks were then summed to produce the teacher shortage index. Consistent with the calculation and ranking of each component, a high index represented a relatively high teacher shortage area and a low index represented an area of relatively low teacher shortage for the 1988-89 school year. If more than one position had the same index, they were ranked according to the score on the qualification factor.

Based on the above index procedure, speech and hearing and industrial arts were identified as the top two teacher shortage areas for the 1988-89 school year, as they were last year. Similar to last year, media specialist, school psychologist and Latin positions were also ranked high relative to the remaining positions. Also, history/social studies was identified as the area with the least shortage. The five highest and lowest shortage areas are presented in Table 5. All ranked positions are presented in Appendix C along with positions for which no vacancies existed. Rank 1 of the appendix is the qualification component of the teacher shortage index. Rank 2 represents the application rate and Rank 3 is the potential pool of applicants component.

		Teacher Shortage Index,	Table 5 1988-89			
High Index Areas		Low Index Areas				
Speech and Hearing	84	History/Social Studies	8			
Industrial Arts	80	History	10			
Home Economics	74	Intermediate Admir.	14			
School Psychologist	72	English	18			
Special Education	70	Elementary Education	18			
Media Specialist	70	•				

The inclusion of more than one component in the calculation of the teacher shortage index produces different reasons for the ranking of individual positions. A low rank on the teacher qualification component is not necessarily indicative of a low shortage. This explains the high ranking of Latin as a shortage area. Latin ranked relatively low on the teacher qualification component. Yet, the ranks for the application rate and applicant pool components were very high. Hence, the shortage index for Latin was relatively high. Nevertheless, the high rank is considered to be an anomaly.

Six areas were identified as areas of relative teacher shortages. None of the high index areas are traditional core subject areas. Shortages were most prevalent in areas related to exceptional children, vocational-technical subjects and support staff positions. Each area was ranked high on all three components of the shortage index. Most notably, speech and hearing and industrial arts ranked very high on all three index components. Further, speech and hearing and special education ranked the highest on the teacher qualification component of the index. The lack of qualified teachers was highest for these areas.

The five areas identified as low shortage areas for the 1988-89 school year were all ranked low on the teacher qualification component. Rankings were also low for the application rate and applicant pool components. The only notable exception was the moderate ranking of the potential pool of



applican; for elementary education positions. This occurred due to the number of provisional certificates awarded relative to the total number of advertised vacancies for the current school year.

The teacher shortage index demonstrated that there were no shortages in math and science for the 1988-89 school year. All advertised vacancies, except for one in general science, were filled by September 1. The lowest ranking component for each area was the ratio of total vacancies to provisional certificates. Biology had the lowest rank on this component. Hence, for the advertised biology positions the number of teachers with provisional certificates exceeded the number of available positions.

DISTRICT RECRUITING PRACTICES

A checklist was added to the teacher shortage survey to investigate the extent to which districts recruit teachers and administrators for their advertised vacancies. The quantitative analyses of previous sections of this report account for the results of the hiring process until September 1. Recruiting practices were examined to provide information related to a relevant aspect of the hiring process. The information provided by the checklist accounted for all the recruiting practices implemented by a school district. Therefore, the results cannot be associated with any individual position or position group.

The checklist included three major types of recruiting practices. The first was advertising. The recruiting activities included advertising in Connecticut newspapers, out-of-state newspapers and professional publications. A second recruiting practice was registration with college or university career placement offices. Separate items were included for Connecticut and out-of-state placement offices. The third activity on the checklist was attendance at job fairs at either Connecticut or out-of-state colleges or universities. Finally, an item was included to account for any other recruiting practice.

Almost every district with an advertised vacancy used at least one approach to recruit applicants. More than two-thirds of the districts used two to four approaches. Some districts (3.6%) did not recruit applicants and a few districts (1.8%) used seven different forms of recruiting. More districts (89.8%) tended to recruit in Connecticut compared to districts (80.1%) which recruited out-of-state.

The use of a particular recruiting strategy by districts varied extensively. Advertising in Connecticut newspapers and attendance at out-of-state job fairs were the two most popular recruiting practices for the 1988-89 school year. Almost every district with advertised vacancies placed advertisements in Connecticut newspapers (88.6%), while more than half of the districts placed advertisements in out-of-state newspapers (56.6%) and professional publications (55.4%). Job fairs were attended by more districts at out-of-state colleges and universities (73.5%) than at Connecticut colleges and universities (11.4%). Registration with college or university career placement offices was not a widely used form of



recruitment. Very few districts were registered with career placement offices in Connecticut (12.0%), but more districts (44.6%) were registered with out-of-state career placement offices.

In addition to the specific recruiting practices, a total of 35 school districts (28.9%) used some other recruiting approach. Twenty (57.1%) of these districts used either teacher placement agencies, affirmative action agencies or agencies that serve women and minorities. Five districts mentioned they placed a listing with the Connecticut Education Association. Four districts mentioned networking with other school districts, two advertised on the radio and one other district recruited at alternate route receptions.

SUMMARY AND CONCLUSIONS

۲.

An estimation of the possible existence of a teacher shortage in Connecticut for the 1988-89 school year was made at both the state level and at the individual position level. At the state level, 33,649 applications from appropriately certified candidates were reviewed for 1,966 full-time and 392 part-time vacancies. At first glance it may appear that there was no teacher shortage in Connecticut. However, the general information provided by the aggregation of data at the state level is limited. It does not indicate whether shortages existed for specific teacher and administrative positions.

Analyses of positions with reference to the number of districts with vacancies and the number of applications reviewed by the typical district provided more specific results. Collectively, the results indicated that speech and hearing was an area of high shortage while elementary education was an area with no teacher shortage. Also, there was no shortage of teachers in core subject areas required for high school graduation. Moreover, there is no evidence to indicate the existence of an administrator shortage at the present time.

Finally, the teacher shortage index ranked speech and hearing, industrial arts, home economics, school psychologist and media specialist positions the highest shortage areas for the 1988-89 school year. Speech and hearing, industrial arts, media specialist, special education and school psychologist positions were similarly ranked for the 1987-88 school year. The results of all analyses led to the conclusion that there was no general teacher shortage in Connecticut for the 1988-89 school year. However, the areas identified by the shortage index remained difficult to fill with qualified applicants.

While the analyses account for what appear to be strong indicators of teacher shortages, there are some variables related to the hiring process which are not included. First, the survey only accounts for positions filled prior to September 1. Consequently, many administrator positions are not represented. Second, the survey does not account for the length of time a position was vacant. It is not known how difficult it was to find qualified applicants. Third, recruitment practices were not associated with

any individual teacher or administrator position. It is not known which positions required a more extensive search.

Another source of available information is the comments and observations provided by administrators at different school districts. Summaries of these optional responses provide explanations for current circumstances as well as suggestions for subsequent policies.

Comments and observations related to the shortage index rankings suggested that many applicants are available for elementary education positions. Many administrators noted the large number of applicants available for this low ranking area. In Windsor, approximately 1,000 applications were received to fill the positions created by the construction of a new elementary school. Also, many other districts did not advertise elementary education vacancies since they have large files of qualified applicants and continuously receive more applications throughout the school year.

Administrators affected by the shortage of applicants in high shortage areas noted the problem and some offered suggestions to address the problem. Many comments were made about the unavailability of qualified speech and hearing, special education and industrial arts teachers, as well as media specialists. To help reduce these shortages, it was suggested that institutions of higher education recruit more speech as well as language majors and provide more in-depth training for special education majors. It was also recommended that the state Department of Education review the legislative statutes pertaining to the licensing and certification of speech pathologists.

POLICY IMPLICATIONS

It should be understood that the results presented in this report are valid for the 1988-89 school year only. They are not necessarily predictive of future trends. Teacher supply and demand is better suited for this purpose. In addition, districts in growing communities also need to monitor population growth and the influx of residents with school-age children. This information should enable districts to monitor their current needs and anticipate future trends.

The major implications of this research are related to the number of available qualified applicants. For the 1988-89 school year, the number of available positions exceeded the number of provisional certificates issued to speech and hearing specialists, industrial arts teachers, home economics teachers, school psychologists and special education teachers. Consequently, there is a need for institutions of higher education to actively recruit students to major in the areas of identified shortage. Also, school districts need to recruit applicants from other states.

APPENDICES



Appendix A
Teacher Shortage Survey - September 1988
Statewide Vacancies and Certified Applicants
By Position

				SEPTEM VACAN FULL-	CIES PART-	VACAI NO QUAI PERSON FULL-	FOUND PART-
POSITION	TIME	TIME	APPLICANTS	TIME	TIME	TIME	TIME
TEACHERS							
ADULT ESOL AGRICULTURE ART BILINGUAL EDUCATION BLIND EDUCATION BUSINESS and OFFICE ED DEAF EDUCATION DRIVER EDUCATION ELEMENTARY EDUCATION	3 48 57 3 14 4 0 511	0 0 26 1 0 5 0 0 35	16 12 693 201 33 201 18 0	0 1 2 7 0 1 0 0 2 3	0 8 1 0 0 0	0 0 6 0 0 0	0 0 2 0 0 0 0
ENGLISH FOREIGN LANGUAGES FRENCH GERMAN ITALIAN LATIN RUSSIAN SPANISH OTHER LANGUAGE HEALTH HISTORY HISTORY/SOCIAL STUDIES HOME ECONOMICS INDUSTRIAL ARTS/	79 12 2 1 2 0 20 0 16 4 40 16	13 16 1 0 4 2 18 2 4 0 8	1,346 246 7 1 11 6 279 5 190 47 1,125 157	3 1 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 1 0	0 1 0 0 0 0 0 0	0 0 0 0 0 0 0
TECHNICAL EDUCATION KINDERGARTEN/PRE K MARKETING MATHEMATICS MEDIA SPECIALIST MUSIC PARTIALLY SIGHTED PHYSICAL EDUCATION PSYCHOLOGY READING CONSULTANT RELATED SUBJECTS GUIDANCE COUNSELOR SCHOOL DENTAL HYGIENIST SCHOOL NURSE-TEACHER	28 56 3 54 34 63 0 44 4 32 4 44 0	2 30 0 6 3 29 0 10 2 8 0 8	192 2,804 10 703 271 923 0 634 47 382 40 403 0	2 0 1 2 8 2 0 0 0 2 0 6 0 0	0 1 0 0 1 3 0 0 0 0	1 0 0 0 6 0 0 0 0 0	0 0 0 1 2 0 1 0 3 0 0

Appendix A (continued)

	VACA	88-89 NCIES	NUMBER OF		MBER 1	NO QUA	NCY: LIFIED FOUND
POSITION	FULL.	PART- TIME	CERTIFIED APPLICANTS	FULL- TIME	PART- TIME	FULL- TIME	PART- TIME
SCHOOL PSYCHOLOGIST	36	27	415	5	6	4	3
SCHOOL SOCIAL WORKER	29	4	291	7	1	4	0
SCIENCE BIOLOGY	16	0	204	^	•	•	_
CHEMISTRY	15 11	8	324	0	0	0	0
EARTH SCIENCE	6	4 1	229	0	0	0	0
GENERAL SCIENCE	27	'n	86 461	_	0	0	0
PHYSICS	4	2		2 0	1	0	1
SOCIOLOGY	1	Õ	82 6	0	0 0	0	0
SPECIAL EDUCATION	•	U	U	U	U	U	0
LEARNING DISABLED	152	24	1,750	8	5	4	2
SOCIAL/EMOTIONAL	73	5	611	4	1	3	3 1
MENTALLY RETARDED	63	5	39 1	9	ò	8	Ó
PHYSICALLY HNDCP	6	Ö	29	i	Ŏ	1	
OTHER SPECIAL ED	30	12	549	4	ĭ	i	0 1
SPEECH and HEARING	70	30	312	17	8	13	8
OCCUPATIONAL SUBJECTS		ī	40	4	Ŏ	2	Ö
SKILLED TRADES	20	0	20	5	Ö	5	Ŏ
COMPUTER EDUCATION	18	4	185	2	ĭ	Ŏ	Ŏ
GIFTED and TALENTED	24	. 6	226	2	1	0	Ö
TEACHER TOTAL	1,811	387	29,907	113	46	65	29
ADMINISTRATORS							
PRINCIPAL	42	0	1,297	5	0	0	0
VICE PRINCIPAL	46	Ŏ	1,105	2	Ö	ĭ	Ö
SUPERVISOR/DIR	23	2	295	2	Ö	Ò	Ö
PUPIL PERSONNEL	11	Ö	268	Ō	Ŏ	Ŏ	
ASST SUPERINTENDENT	5	0	289	Ĭ	Ö	Ö	0 0 0 0
OTHER ADMINISTRATOR	14	3	154	1	i	Ö	Ŏ
SCH. BUSINESS OFFICIA	L 9	0	101	4	0	3	Ō
SUPERINTENDENT	5	0	233	1	0	0	0
4 BM 7 44 G 7 A 7 A 7 A							
ADMINISTRATOR TOTAL	155	5	3,742	16	1	4	0
			0)176		•	7	U
	2252	===	=====	===	==	==	==
STATE TOTAL	1,966	392	33,649	129	47	69	29

Appendix B Teacher Shortage Survey - September 1988 Subject Area Shortage Evaluation

DOCUTION	DISTRICTS: FULL-TIME	DISTRICTS: NO QUALIFIED PERSON FOUND	APPLICATIONS PER DISTRICT
POSITION	VACANCIES	TOTAL PERCENT	MEDIAN MAX
TEACHERS			
ADULT ESOL AGRICULTURE ART BILINGUAL EDUCATION BLIND EDUCATION BUSINESS and OFFICE ED DEAF EDUCATION ELEMENTARY EDUCATION ENGLISH FOREIGN LANGUAGES	2 3 31 6 2 11 2 114 46	0 0 0 0 0 0 1 17 0 0 0 0 0 0	8 10 4 6 15 47 11 150 17 30 10 30 9 14 80 1,000 20 100
FRENCH GERMAN ITALIAN LATIN SPANISH HEALTH HISTORY HISTORY/SOCIAL STUDIES HOME ECONOMICS INDUSTRIAL ARTS/	12 2 1 1 18 14 3 28 13	1 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9 30 3 5 1 1 2 2 8 15 10 35 15 30 26 117 6 30
TECHNICAL EDUCATION KINDERGARTEN/PRE K MARKETING MATHEMATICS MEDIA SPECIALIST MUSIC PHYSICAL EDUCATION PSYCHOLOGY READING CONSULTANT RELATED SUBJECTS GUIDANCE COUNSELOR SCHOOL NURSE-TEACHER SCHOOL PSYCHOLOGIST SCHOOL SOCIAL WORKER SCIENCE	24 36 1 35 28 45 28 3 23 2 33 11 32 21	1 4 0 0 0 0 0 0 0 0 5 18 0 0 0 0 0 0 0 0 0 0 1 50 3 9 0 0 4 13 4 19	5 25 25 400 10 10 15 55 7 30 15 50 15 57 8 20 11 60 20 35 10 35 6 12 9 30 10 45
BIOLOGY CHEMISTRY EARTH SCIENCE GENERAL SCIENCE PHYSICS	13 10 6 20 4	0 0 0 0 0 0 0 0	10 50 11 75 10 40 18 60 18 35



Appendix B (continued)

	DISTRICTS:	NO Q	RICTS: UALIFIED	APPLICA'	
DOCUTION	FULL-TIME	PERSO		PER DIS	
POSITION	VACANCIES	TUTAL	<u>PERCENT</u>	<u>MEDIAN</u>	MAX
SOCIOLOGY	1	0	0	6	6
SPECIAL EDUCATION					
LEARNING DISABLED	8 1	2	2	15	90
SOCIAL/EMOTIONAL	41	3	7	10	51
MENTALLY RETARDED	23	4	17	16	50
PHYSICALLY HNDCP	4	1	25	8	10
OTHER	27	1	4	10	200
SPEECH and HEARING	43	8	19	5	22
OCCUPATIONAL SUBJECTS	5	2	40	8	18
SKILLED TRADES	1	1	100	20	20
COMPUTER EDUCATION	16	0	0	6	30
GIFTED and TALENTED	20	0	0	10	33
ADMINISTRATORS					
PRINCIPAL	30	0	0	34	178
VICE PRINCIPAL	37	1	3	24	80
SUPERVISOR/DIRECTOR	16	0	0	15	43
PUPIL PERSONNEL	9	0	0	15	87
ASST. SUPERINTENDENT	5	0	0	60	90
OTHER ADMINISTRATOR	12	0	0	8	35
SCH. BUSINESS OFFICIAL	9	3	33	12	25
SUPERINTENDENT	5	0	0	50	70

POSITION	VACANCY: NO QUALIFIED PERSON FOUND	TEMPORARY EMERGENCY PERMIT	MINOR ASSIGNMENT	RANK	MEDIAN 1 APPLICATIONS	RANK 2	TOTAL VACANCIES	PROVISIONAL CERTIFICATES	RANK 3	TEACHER SHORTAGE INDEX
SPEECH & HEARING	21	2	0	30	5.0	27	100	61	27	84
INDUSTRIAL ARTS/TECH ED	-i	11	Ŏ	28	5.0	27	30	21	25	80
HOME ECONOMICS	į	Ö	Ö	18	5.0	27	26	11	29	74
PSYCHOLOGIST	7	Õ	Ö	27	7.5	22	63	60	23	72
SPECIAL EDUCATION	22	Ř	Ŏ	31	10.0	15	370	337	24	70
MEDIA SPECIALIST	7	17	Ŏ	29	6.5	26	37	67	15	70
LATIN	Ó	'i	Š	14	2.5	30	6	4	26	70
OTHER LANGUAGE	ŏ	i	í	Ė	2.5	30	ž	1	28	63
SOCIAL WORKER	ŭ	Ó	Ó	23	7.5	22	33	58	16	61
SCHOOL COUNSELOR	Š	ň	ŏ	24	8.0	19	52	111	11	54
ART	ź	ň	ŏ	18	10.0	15	74	74	21	54
FRENCH	1	ĭ	ĭ	17	8.0	19	28	45	18	54
MUSIC	ģ	i	Ó	21	12.5	8	92	90	22	51
HEALTH	1	Ġ	ŏ	Ġ	7.5	22	2 0	30	19	50
SPANISH	'n	ŏ	ž	ź	7.0	25	38	40	20	47
SCHOOL BUSINESS OFFICIAL	ž	ŏ	ŏ	22	12.0	- 6	9	18	12	43
READING CONSULTANT	จั	ŭ	ŏ	26	11.5	11	4Ó	144	5	42
EARTH SCIENCE	ň	Ž	ĭ	14	10.0	15	Ť	16	10	39
BILINGUAL ED	ĕ	ō	ò	25	11.0	12	5 8	Ŏ	•	37
OCCUPATIONAL SUBJ	9	ŏ	ň	18	8.0	19	10	Ŏ	•	37
PHYSICAL ED	ī	ŏ	ŏ	ġ	12.0	Ì	54	92	17	35
PHYSICS	Ó	ĭ	ĭ	5	10.5	13	6	12	12	30
BUSINESS & OFFICE ED	ŏ	i	1	5	10.0	15	19	47	8	28
BIOLOGY	Ŏ	Ž	1	14	10.5	13	23	117	1	28
MATHEMATICS	Ŏ	Ō	7	13	15.0	5	60	168	7	25
GENERAL SCIENCE	ĭ	Ŏ	1	12	15.0	5	34	102	6	23
ELEMENTARY ED	Ó	ĺ	Ó	3	52.5	1	632	1226	14	18
ENGLISH	Ŏ	Ò	5	5	20.0	4	92	211	9	18
INTERMEDIATE ADMINISTRATOR	1	Ō	Ö	9	23.0	3	146	742	2	14
HISTORY	Ó	Ō	1	1	15.0	5	4	15	4	10
HISTORY/SOCIAL STUDIES	Ö	G	4	3	25.0	2	48	206	3	8
GERMAN	0	0	0	•	1.0	•	3	5	•	•
ITALIAN	Ö	0	0	•	1.0	•	1	2	•	•
RUSSIAN	Ö	0	0	•	3.0	•	2	0	•	•
AGRICULTURE	Ö	0	0	•	4.0	•	3	0	•	•
NURSE-TEACHER	0	0	0	•	5.0	•	20	6	•	•
COMPUTER ED	0	0	0		5.5	•	22	0	•	•
SOCIOLOGY	0	0	0	•	6.0	•	1	0	•	•
ADULT ESOL	Ö	Ō	0	•	8.0	•	3	0	•	•
PSYCHOLOGY	0	0	0	•	8.0	•	6	0	•	•
GIFTED & TALENTED	0	0	0	•	8.0	•	30	0	•	•
DEAF ED	0	0	0	•	9.0	•	4	11	•	•
CHEMISTRY	0	0	0	•	9.0	•	15	84	•	•
MARKETING	0	0	0	•	10.0	•	3	6	•	•
BLIND ED	0	0	0	•	16.5	•	3	Ō	•	•
SUPERINTENDENT	0	0	0	•	50.0	•	5	0	•	•

RANK 1 = QUALIFICATION FACTOR
RANK 2 = APPLICATION RATE FACTOR
RANK 3 = POTENTIAL POOL OF APPLICANTS FACTOR

TEACHER SHORTAGE SURVEY ED 156 Rev. 8/88 C.G.S. 10a-163

INSTRUCTIONS

Read complete instructions before completing form.
 Prepare in duplicate.
 Send original to address below.
 Due September 15, 1988

5. Contact person: Stephen Ruffini 566-5446

TO: CONNECTICUT STATE DEPARTMENT	OF EDUCATION,	Office of Research and E	evaluation, Box 2219,	Hamers, C1 06145	
District Name	District Code	Contact	Person	Phone	
Γ					
L_		<u>.</u>			
Superintendent's Signature			•	Date	
				والمستوال المستوالية	
Item I	(A) Position	(B) Number of	(C) Number of	(D)	
Certification/	Advertis	ed Applications Screened:	September 1st	Vacancy: No Qualified	
Subject Area	Advertis For 88- School Y	39 Screened: ear Appropria:ely	Vacancies	Person Found	
·	FT P	T Certified	FT PT	FT PT	
01. Adult ESOL					
02. Agriculture					
03. Art					
04. Bilingual Education					
05. Blind Education					
06. Business and Office Educatio	n				
07. Deaf Education					
08. Driver Education					
09. Elementary Education					
10. English					
FOREIGN LANGUAGE	1 '				
11. French				ļ	
12. German					
13. Italian			· · · · · · · · · · · · · · · · · · ·		
14. Latin	- -				
15. Russian			 	 - 	
16. Spanish 17. Other language			 	 	
			++		
18. Health 19. History	- - -		 	 	
20. History/Social Studies	 - -		 	 	
21. Home Economics	1				
22. Industrial Arts/Technology Education					
23. Kindergarten/Prekindergart	en				
24. Marketing and Distribution					
25. Mathematics					
26. Media Specialist					
27. Music					
28. Partially Sighted					
29. Physical Education					
30. Psychology			 	 	
31. Reading Consultant				 	
32. Related Subjects (RVT Schoo	ls) [1	I	



(Item I continued)	A. Positions		B. Number of Applications	Vacancies		D. Vacancy: No Qualified Person Found	
Certification/	Advertised For 88-89 School Yr.		Screened:				
Subject Area	FT	PT	Appropriately Certified	ТЧ	PT	FT	PT
33. School Counselor							
34. School Dental Hygienist							
35. School Nurse-teacher							
36. School Psychologist							
37. School Social Worker	†						
SCIENCE							
38. Biology							:
39. Chemistry					-		
40. Earth Science	 						-
41. General Science							
42. Physics	1						
				,			-
43. Sociology SPECIAL EDUCATION	 					 	
		ŀ				1	ļ
44. Learning Disabled 45. Social/Emotional	1		 			 	
	ļ	_					
46. Mentally Retarded	<u> </u>		 		-		
47. Physical Handicap							
48. Other		 					
49. Speech and Hearing							
TRADE AND INDUSTRIAL						ĺ	
50. Occupational Subjects							
51. Skilled Trades (RVT Schools)	 	<u> </u> 					
OTHER SUBJECTS*					·		
52. Computer Education		 	<u> </u>				
53. Gifted/Talented	-						
ADMINISTRATION							
54. Principal							 _
55. Vice-Principal	-						-
56. Supervisor/Director	-						
57. Pupil Personnel		}					
58. Assistant Superintendent						<u> </u>	
59. Other					-		
60. School Business Official							
61. Superintendent		<u> </u>					
*Certification required at appropriate	grade	level.					
Item II. Number of authorized certi-	fied pro	fessiona	al positions for	1988-89.			
		4				000 00	
Item III. Please check all items that	it descri						
Advertised in CT newspapers		R	egistered with reer placement	out-of-sta	te colle	ge/unive	rsity
Advertised in out-of-state newsp			reer placement ttended CT coll				
Advertised in professional public Registered with CT college/unive			ttended C1 con ttended out-of-s				ob fairs
career placement offices			ther				
COMMENTS (Please attach an additional sheet if necessary):							
COMMENTS (FIGURE ALLECTI ALL AUGITION	ngi Siicei	. 11 1160	coom y J.				
·							



A STATE

Connecticut State Department of Education

Program and Support Services

Scott Brohinsky Deputy Commissioner

Division of Research, Evaluation and Assessment

Pascal L Forgione, Jr., Director

Bureau of Research and Teacher Assessment

Raymond L. Pecheone, Chief

Research Services

Peter Prowda, Coordinator

Stephen J. Ruffini Education Service Specialist

It is the policy of the Connecticut State Board of Education that no person shall be excluded from participation in, denied the benefits of, or otherwise discriminated against under any program, including employment, because of race, color, sex, national origin, religion, age, mental or physical disability, mental retardation, or marital status.





