Texas Study of Personnel Needs in Special Education

May 2006

Prepared for

Region 4 Education Service Center

and the

Texas Education Agency

Prepared by

Texas Center for Educational Research

TCER

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Texas Center for Educational Research

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This report was commissioned by the Texas Education Agency and Region 4 Education Service Center to encourage greater accountability and establish data-driven planning and self-assessment processes that will help schools, the state, and the statewide Comprehensive System for Personnel Development Leadership Council (CSPD) meet provisions of the Individuals with Disabilities Education Act (IDEA, 2004).

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Texas Study of Personnel Needs in Special Education

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1. Introduction

Background

This study supports efforts by the U.S. Department of Education, Office of Special Education Programs (OSEP) to foster greater state accountability and establish data-driven planning and self-assessment processes that help states and schools to address provisions of the recently enacted Individuals with Disabilities Education Improvement Act (IDEA) of 2004. In response to state-level requirements, the Texas Education Agency (TEA) asked Region 4 Education Service Center (ESC) to facilitate the second statewide study of special education professionals personnel needs. This study, which was authorized in December 2004, augments the initial *Statewide Study of Special Education Professionals' Personnel Needs* conducted by the Texas Center for Educational Research (TCER) and published in September 2001.

At the time of the previous study, the literature indicated that there was a chronic shortage of special education teachers throughout the United States. A nationwide study of special education identified this shortage as a critical factor influencing teacher quality (Carlson, et al., July 2002)—with fewer job applicants, school administrators may have little choice but to hire less qualified special education teachers. In the TCER study conducted in 2001, we found critical shortages in Texas schools for special education teachers, as well as for educational diagnosticians, speech language pathologists, and special education paraprofessionals. Consistent with findings regarding general teacher shortages for the nation (Ingersoll, January 2001), and for Texas schools (Herbert & Ramsay, September 2004), research in special education indicates that the most salient factor contributing to personnel shortages is employee turnover (Billingsley, 2004; Carlson, et al., July 2002; McLeskey, Tyler, & Flippin, 2004).

One approach to ameliorating high turnover is to improve employee retention, and there are numerous suggestions for how this might be accomplished in education (e.g., Firestone & Pennell, 1993; Herbert & Ramsay, 2004; Norton, 1999; Rosenholtz & Simpson, 1990). Research on turnover of special education personnel describes numerous organizational, job, and individual work conditions that might be used to encourage employee retention (e.g., Billingsley, 1993, 2004; Brownell & Smith, 1993; Gersten, et al., 2001; Stempien & Loeb, 2002). Common prescriptions for increasing special education personnel retention include strategies such as designing appropriate financial incentives, offering mentoring and induction programs for new teachers, increasing administrative support for special educators, and supporting professional development activities in special education (Billingsley, 2004; Billingsley & Cross, 1992; Brownell & Smith, 1993; Carlson, et al., 2002; Council on Exceptional Children Today, 2002; Fore & Martin, 2002; Gersten, et al., 2001; National Clearinghouse for Professions in Special Education, 1998; Yell, et al., 2002).

The current study was designed to identify existing shortages in special education teacher and other professional positions, to investigate the various issues that appear to influence turnover in these positions, and to identify effective approaches to retention.

Purpose

The purpose of the project was to conduct a study of special education personnel issues affecting services for students with disabilities in Texas. More specifically, the project explored personnel issues from multiple perspectives. First, researchers surveyed human resource administrators and special education administrators to gain an understanding of personnel shortages and other issues at the organizational level. Researchers also surveyed special education teachers and other special education professionals

(e.g., teachers and others who provide direct services for students) to gauge the availability and quality of special education personnel and to explore factors affecting workforce quality.

Additionally, the study accounts for the varied ways in which special education services are delivered in the state. First, researchers collected data for single school districts that generally manage special education personnel requirements autonomously (that is, districts hire or contract for their own personnel). Second, we collected data for districts that meet at least some of their special education personnel needs through participation in Shared Service Arrangements (SSAs) with other school districts. Finally, we collected data for open-enrollment charter schools that may operate either as a single entity or may be part of a special education SSA.

Research Questions

Researchers were guided by broad research questions relevant to the overall evaluation purpose. Specific questions relate to the respondents who are most knowledgeable in a particular area. Questions geared specifically toward special education and human resource administrators and special education teachers and other professionals as detailed below guided the study's instrumentation and methodological approach.

- What special education personnel needs exist in the state?
- How are special education teachers and other professionals recruited?
- How are currently employed special education teachers and other professionals retained?
- What are the professional development needs of special education teachers and other professionals?
- What are the characteristics of special education teachers and other professionals currently employed in the state?

This second statewide study, conducted by TCER, began in January 2005. Researchers distributed surveys by mail in April, May, and June 2005, and conducted analyses during spring and early fall 2005. The final report provides information to assist the TEA, Region 4 ESC, and other statewide stakeholders in promoting and maintaining an adequate supply of special education teachers and other professionals "highly qualified" to meet the needs of students with disabilities.

Organization of the Report

Report sections are organized around findings for the study's major research questions. Key findings are summarized for Texas single districts and SSAs.

- *Section 2, Method* gives a description of the instrument development and validation process, the four surveys used in the study, and the data collection procedures. We also discuss the generalizability of the study to public schools statewide.
- *Section 3, Special Education Personnel Staffing Needs* provides information on special education positions and critical shortage areas, and special education personnel turnover. This section specifically addresses the special education personnel needs in Texas public schools.
- *Section 4, Hiring Special Education Personnel* provides information on recruitment strategies and barriers to hiring qualified special education personnel.
- S*ection 5, Retaining Special Education Personnel* provides information on retention strategies and barriers to retaining qualified special education personnel.

- *Section 6, Special Education Teachers* provides information on teacher workload and teaching arrangements, teaching experience and preparation of special education teachers, perceptions of the work environment, and intentions to remain in the job.
- *Section 7, Other Special Education Professionals* provides information on special education professionals workload and service arrangements, certifications attained by special education professionals, perceptions of the work environment, and intentions to remain in the job.
- *Section 8, Professional Development Needs of Special Education Personnel* provides information on administrators' perceptions of the degree to which their staff required professional development. This section also identifies the professional development areas in which special education teachers and other professionals had completed training as well as the areas in which they desired additional training.
- *Section 9, Special Education Staffing in Charter Schools* provides information on the special education staffing levels in charter schools, and the recruitment, staffing, and retention strategies utilized by these schools.
- *Section 10, Policy Implications and Recommendations* discusses the implications of the results of the current study, and recommendations for addressing recruitment, staffing, and retention issues relative to special education personnel.

2. Method

Instrument Development and Validation

As a first step in instrument development, researchers conducted a review of the literature on teacher retention, special education teacher personnel issues, and employee turnover to identify issues relevant to staffing of special education personnel. We developed four separate surveys, with items tailored for human resource and special education administrators, special education teachers, and other special education professionals. Some survey items came from previously administered surveys identified through the literature review, additional items were drawn from administrator surveys used in the *Statewide Study of Special Education Professionals' Personnel Needs* (TCER, 2001), and researchers at TCER developed other survey items based on some of the theories identified in the literature review.

To improve the validity of the surveys, researchers first had professionals associated with the TEA and Region 4 ESC, who had expertise in the field of special education, review draft questionnaires. In March 2005, we conducted interviews with a small sample of special education administrators and teachers who were potential survey respondents. Twenty-one administrators and teachers representing both single districts and special education Shared Service Arrangements (SSAs) participated in small-group interviews at the Region 4 ESC. Interviews, which lasted about two hours, allowed respondents to discuss their responses to survey questions concerning recruitment, staffing, and retention strategies for special education personnel, work conditions influencing retention, and positions currently being staffed. Feedback from the group interviews revealed questions on the surveys that omitted critical issues, or were misleading or confusing. Researchers next revised the questionnaires to alleviate identified problems and converted them into machine scannable forms.

Special Education Personnel Needs Surveys

The *Special Education Personnel Needs Survey for Special Education Administrators* was designed to gather information from administrators of district special education programs and from administrators of special education SSAs. Survey items addressed staffing and retention strategies, barriers to retention, professional development needs of personnel. We also asked special education administrators for their approaches to meeting requirements for "highly qualified" personnel, and for their feedback regarding hiring teachers from alternative certification programs. In addition, administrators provided general information, including their years experience in the field of special education.

The *Special Education Personnel Needs Survey for Human Resource Administrators* was designed to gather information on special education personnel issues from central administrators who were directly involved in recruiting and hiring decisions. Survey items addressed special education personnel staffing levels and shortages, recruitment strategies, turnover in special education jobs, barriers to hiring and retaining personnel, and future staffing issues.

The *Special Education Personnel Needs Survey for Special Education Teachers* was designed to gather information regarding professional characteristics of teachers working in special education, as well as information about their jobs and work environment. Survey items addressed class sizes and workload, teaching arrangements, teacher preparation and certification, teacher attitudes about the job, perceptions of the work environment, and professional development needs.

The S*pecial Education Personnel Needs Survey for Special Education Professionals* was designed to gather information regarding the preparation and work of professionals in special education (i.e.,

educational diagnosticians and speech language pathologists). Survey items addressed descriptions of the work and workload, certifications, attitudes about the job, perceptions of the work environment, and professional development needs. (See Appendix F for copies of the four surveys used in the study.)

Procedures

We identified the survey populations, obtained addresses for individuals in each survey group, and mailed surveys out in April, May, and June of 2005. This section describes the procedures we followed in preparing for each of the surveys.

Special Education Administrators

For the survey of special education administrators, researchers obtained a list of administrators in Texas public schools from the Texas Council of Administrators of Special Education (TCASE). Questionnaires were mailed to special education administrators in 344 single, traditional districts and 160 charter schools. Additionally, questionnaires were mailed to special education administrators in each of the 131 SSAs for traditional school districts and the 4 SSAs for charter districts operating in 2004-05

We obtained data regarding district participation in SSAs for special education services for the 2004-05 school year from the SSA directory available on the TEA website. We updated this directory with information from the TCASE directory, and feedback from special education administrators who contacted TCER by phone after receiving our mailed questionnaire.

Human Resource Administrators

For the survey of human resource administrators, we obtained a list of human resource administrators for all of the traditional public school districts in Texas from the Texas Association of School Boards (TASB). This list was augmented with names of the directors of open-enrollment charter schools listed in the current Texas Education Directory. Human resource administrator questionnaires were mailed to 1,039 traditional school districts and 188 charter schools in operation during 2004-05. Administrators for each of the 135 special education SSAs operating in 2004-05 (131 SSAs represented traditional districts, 4 SSAs represented charter schools) were also mailed human resource administrator questionnaires. (We excluded several school districts that appeared to have a mission different from the typical public schools. Specifically, we excluded 13 charter schools that were identified solely as alternative educational programs, as well as traditional districts identified as disciplinary alternative educational programs. We also excluded the Texas Youth Commission programs, the Texas School for the Blind and Visually Impaired, and the Texas School for the Deaf.)

Special Education Teachers and Other Professionals

For the survey of special education teachers and other professionals, TCER requested that the TEA provide a list of teachers and other professional personnel who served special education students in Texas public schools during the 2004-05 school year. The TEA extracted this employee database from the Public Education Information Management System (PEIMS).

The PEIMS special education data set included 31,516 special education teachers who taught at campuses in 1,011 public school districts (We excluded teachers who were assigned to campuses identified as alternative educational programs, or as disciplinary alternative education programs. We also excluded personnel who were working at a campus with an identification number that was not in the TEA askTED online directory at the time of the surveys.) From this group, we selected a random sample of 40 percent of those teachers working at least half-time. This large sample was designed to ensure an adequate

response rate from all regions of the state. Surveys were mailed to 9,193 special education teachers in late April 2005, and a follow-up reminder post card was mailed to encourage teachers to respond to the survey.

The PEIMS special education data set also included 6,106 other special education professionals who served 503 public school districts (We excluded other professionals who were assigned to campuses identified as alternative educational programs, or as disciplinary alternative education programs). From this group, we selected a random sample of 85 percent of those professionals working at least half-time. This large sample was designed to ensure an adequate response rate from all parts of the state. Surveys were mailed to 4,709 other special education professionals in late April 2005, and a follow-up reminder post card was planned to encourage these professionals to respond to the survey.

Delays in getting the special education database from the TEA meant that survey distribution had to be postponed. Since the due date printed on questionnaires was April 29, 2005—the same week that questionnaires were mailed out—researchers mailed reminder post cards the week following survey distribution, and included a notice extending the deadline. In addition to sending the postcard reminder, as a way to encourage survey participation, TCER also provided a drawing for $25.00 gift certificates to Amazon.com. Survey respondents were asked to submit a brief entry form with their contact information. During the first week of June, research staff randomly selected a total of 10 teachers and professionals who had returned contact information with completed questionnaires, and awarded the gift certificates.

Characteristics of Administrator Respondent Groups

Response Rates

For each of the surveys, we compared the number of completed questionnaires we received to the number we originally mailed to administrators. The response rates for each survey are presented in Table 2.1. For traditional schools, the overall response rate for human resource administrator surveys was 40.2 percent, and for special education administrator surveys, it was 53.1 percent (Table 2.1). For charter schools, 25 percent of human resource administrators responded to the survey, and the response rate for special education administrators was 18.9 percent (Table 2.2). While some of these response rates appear to be fairly low, overall they compare well with previous studies in public schools, and in our previous 2001 special education needs assessment (response rates of 38 to 44 percent).

Table 2.1. Administrator Survey Response Rates: Traditional Districts

	Districts or SSAs Surveyed	Number of Respondents	Response Rate
Human Resource Administrator Survey			
Single districts	344	140	40.7%
SSA participant districts	695	288	41.4%
SSAs	131	42	32.1%
Total	**1,170**	**470**	**40.2%**
Special Education Administrator Survey			
Single districts	344	184	53.5%
SSAs	131	68	51.9%
Total	**475**	**252**	**53.1%**

Table 2.2. Administrator Survey Response Rates: Charter Schools

	Districts or SSAs Surveyed	Number of Respondents	Response Rate
Human Resource Administrator Survey			
Single schools	160	37	23.1%
SSA participant schools	28	8	28.6%
SSAs	4	3	75.0%
Total	**192**	**48**	**25.0%**
Special Education Administrator Survey			
Single schools	160	28	17.5%
SSAs	4	3	75.0%
Total	**164**	**31**	**18.9%**

In order to determine the degree to which our respondents were representative of the school districts we surveyed, we first evaluated response rates as described above. Secondly, for each group we surveyed (e.g., single districts, SSA participant districts), we compared data describing the respondents' districts to data describing all the districts surveyed. This second approach to assessing the potential generalizability of our research to all public schools in Texas is described below for the administrator surveys.

Respondents' District Characteristics

Using data from 2003-04 AEIS reports, the most recently available, researchers compared the student enrollment characteristics of the districts originally surveyed to the characteristics of the districts represented by respondents. On the whole, responding districts appeared to be quite similar to those of the survey populations—traditional single districts, SSA participant districts, and SSAs (which have the same characteristics as their SSA participant districts), and charter schools.

The comparison of respondent and surveyed districts relative to district size (Tables 2.3 through 2.6) provides a typical example of the degree to which respondents are representative of Texas public schools. We grouped districts by size according to the number of students enrolled. As noted in the tables, the proportion of districts in each size category for survey respondents is very similar to the proportions that characterize the districts or charter schools surveyed. For example, the proportion of traditional single districts with 1,600 to 2,999 students was 15.2 percent for all single districts surveyed (Table 2.3). For respondents, 15.0 percent of *human resource administrator* respondent districts were in this enrollment size category, as were 16.9 percent of *special education administrator* respondent districts.

Table 2.3. Districts by Student Enrollment Category: Traditional Single Districts

	Districts Surveyed		Human Resource Survey Respondents		Special Education Survey Respondents	
Number of Students	Number	Percent	Number	Percent	Number	Percent
1-499 students	21	6.1	4	2.9	8	4.4
500-999 students	27	7.9	7	5.0	14	7.7
1,000-1,599	22	6.4	9	6.4	10	5.5
1,600-2,999	52	15.2	21	15.0	31	16.9
3,000-4,999	71	20.8	34	24.3	32	17.5
5,000-9,999	66	19.3	33	23.6	37	20.2
10,000-24,999	44	12.9	20	14.3	26	14.2
25,000-49,999	25	7.3	10	7.1	16	8.7
50,000 or more	14	4.1	2	1.4	9	4.9
Total	**342**	**100.0**	**140**	**100.0**	**183**	**100.0**

Sources. TEA/AEIS data. Human Resource Administrator Survey; Special Education Administrator Survey.
Note. Enrollment data were missing for 2 of the 344 single, traditional districts surveyed; total student enrollment for the 342 districts was 3,628,191. Total student enrollment for the 140 districts responding to the Human Resource Administrator Survey was 1,220,770. Enrollment data were missing for 1 of the 184 districts responding to the Special Education Administrator Survey; total student enrollment for the 183 districts was 2,190,304.

Table 2.4. Districts by Student Enrollment Category: Traditional Districts Participating in SSAs

	Districts Surveyed		Human Resource Survey	
Number of Students	Number	Percent	Number	Percent
1-499 students	314	45.2	119	41.3
500-999 students	185	26.6	74	25.7
1,000-1,599	103	14.8	57	19.8
1,600-2,999	69	9.9	34	11.8
3,000-4,999	16	2.3	2	0.7
5,000-9,999	6	0.9	2	0.7
10,000-24,999	1	0.1	0	0.0
25,000-49,999	1	0.1	0	0.0
50,000 or more	0	0.0	0	0.0
Total	**695**	**100.0**	**288**	**100.0**

Source. TEA/AEIS data; Human Resource Administrator Survey.
Note. Total student enrollment for the 695 traditional districts participating in an SSA was 621,835. Total student enrollment for the 288 SSA participant districts responding to the Human Resource Administrator Survey was 247,131.

Table 2.5. SSAs by Student Enrollment Category: Traditional SSAs

	SSAs Surveyed		Human Resource Survey		Special Education Survey	
Number of Students	Number	Percent	Number	Percent	Number	Percent
1-499 students	1	0.8	0	0.0	0	0.0
500-999 students	0	0.0	0	0.0	0	0.0
1,000-1,599	6	4.6	2	4.8	2	2.9
1,600-2,999	31	23.7	10	23.8	14	20.6
3,000-4,999	48	36.6	16	38.1	26	38.2
5,000-9,999	39	29.8	12	28.6	22	32.4
10,000-24,999	5	3.8	2	4.8	3	4.4
25,000-49,999	1	0.8	0	0.0	1	1.5
50,000 or more	0	0.0	0	0.0	0	0.0
Total	**131**	**100.0**	**42**	**100.0**	**68**	**100.0**

Sources. TEA/AEIS data; Human Resource Administrator Survey; Special Education Administrator Survey.
Note. Total student enrollment for districts participating in one of the 131 SSAs was 621,835. Total student enrollment for districts represented by the 42 SSAs responding to the Human Resource Administrator Survey was 201,461. Total student enrollment for districts represented by the 68 SSAs responding to the Special Education Administrator survey was 353,681.

Table 2.6. Districts by Student Enrollment Category: Charter Schools

	Charter Schools		Human Resource Survey Respondents		Special Education Survey Respondents	
Number of Students	Number	Percent	Number	Percent	Number	Percent
1-499 students	155	82.4	37	88.1	22	75.9
500-999 students	24	12.8	3	7.1	4	13.8
1,000-1,599	8	4.3	2	4.8	2	6.9
1,600-2,999	1	0.5	0	0.0	1	3.4
3,000-4,999	0	0.0	0	0.0	0	0.0
5,000-9,999	0	0.0	0	0.0	0	0.0
10,000-24,999	0	0.0	0	0.0	0	0.0
25,000-49,999	0	0.0	0	0.0	0	0.0
50,000 or more	0	0.0	0	0.0	0	0.0
Total	**188**	**100.0**	**42**	**100.0**	**29**	**100.0**

Sources. TEA/AEIS data; Human Resource Administrator Survey; Special Education Administrator Survey.
Note. Total student enrollment for the 188 charter schools was 60,425; enrollment data were not available for 13 of the 201charter schools in existence at the time of the survey. Total student enrollment for the 42 charter schools responding to the Human Resource Administrator Survey was 11,379; enrollment data were not available for the 3 additional schools responding to the survey. Total student enrollment for 29 charter schools responding to the Special Education Administrator Survey was 11,162; enrollment data were not available for the 2 additional schools responding to the survey.

In addition to analyzing the distributions by enrollment size categories, we also compared respondents' districts and all districts surveyed on three additional dimensions: (1) proportion of students by ethnic group, (2) distribution of students by service category—students in bilingual programs, limited English proficiency programs, etc., and (3) number of districts by Education Service Center (ESC) region. We conducted the same analyses for the human resource administrators and special education administrators. (These analyses are presented in tabular form in Appendix A). In each analysis, the respondent districts appeared to match the districts surveyed as a whole. As an example, for traditional single districts, 46.0 percent of all students in the districts surveyed were of Hispanic origin. Across all the districts

represented by *special education administrator* respondents, 45.2 percent of the students were Hispanic. And for all districts represented by *human resource administrator* respondents, 45.3 percent of the students were Hispanic. While all proportions did not match exactly, the general demographic patterns and the distribution of respondents throughout the regions of Texas were similar. These similarities were fairly consistent across each of the groups surveyed, including those in the charter schools. Given the similarity of respondent districts to districts surveyed, the results of the human resource administrator and the special education administrator surveys appear to be indicative of the public schools in Texas.

Special Education Administrator Characteristics

Special education administrators from traditional districts who responded to our survey had considerable experience in special education. Administrators in traditional schools and SSAs had slightly more than 20 years experience in special education, on average. Administrators in charter schools had less experience in the field—10 years experience, on average. In terms of experience in an administrative role in special education, administrators in traditional schools had an average of about 10 years experience; charter school special education administrators had almost 5 years experience, on average. In addition to their administrative and other experience, special education administrators typically had teaching experience in the field (Table 2.7).

Table 2.7. Special Education Administrators' Mean Experience in the Field

Experience	Mean	Standard Deviation	Range	Number of Respondents
Single Districts, Traditional				
Total years in special education	21.0	9.8	0-57 yrs.	182
Years teaching special education	8.4	7.0	0-35 yrs.	179
Years administering special education	10.4	9.0	1-34 yrs.	182
SSAs, Traditional				
Total years in special education	20.4	8.5	4-37 yrs.	67
Years teaching special education	7.1	5.7	0-25 yrs.	67
Years administering special education	10.0	6.9	1-31 yrs.	67
Charter Schools				
Total years in special education	10.0	8.7	0-29 yrs.	28
Years teaching special education	5.7	5.2	0-17 yrs.	26
Years administering special education	4.5	4.8	0-19 yrs.	27

Source. Special Education Administrator Survey.
Note. Charter school data includes single district special education administrators.

A large proportion of the traditional district administrators reported having a total of 21 to 30 years experience in special education (37.4 percent of single district respondents, and 40.3 percent of SSA respondents), and some had more than 30 years experience (15.9 percent of single district respondents, and 10.4 percent of SSA respondents). In charter schools, a smaller proportion of special education administrators had 21 to 30 years experience in special education (14.3 percent), and none of the single charter administrators had more than 30 years experience (Table 2.8).

Interestingly, a number of respondents (15.1 percent of traditional single district respondents, and 11.9 percent of SSA respondents; 23.1 percent of single district charter schools) had no previous teaching experience in special education. Several administrators noted that they had been educational diagnosticians or special education professionals other than teachers before becoming administrators in the field. Typically, these administrators would not have had classroom teaching experience. It is also possible that these respondents had prior experience teaching in general education.

Table 2.8. Special Education Administrators' Experience in the Field

	Single Districts		SSAs		Charter Schools	
Experience	Number	Percent	Number	Percent	Number	Percent
Total Years in Special Education						
0-5 yrs.	10	5.5	3	4.5	11	39.3
6-10 yrs.	23	12.6	8	11.9	7	25.0
11-20 yrs.	52	28.6	22	32.8	6	21.4
21-30 yrs.	68	37.4	27	40.3	4	14.3
31+ yrs.	29	15.9	7	10.4	0	0.0
Total	**182**	**100.0**	**67**	**100.0**	**28**	**100.0**
Years Teaching Special Education						
0 yrs.	27	15.1	8	11.9	6	23.1
1-3 yrs.	26	14.5	13	19.4	7	26.9
4-5 yrs.	27	15.1	10	14.9	4	15.4
6-10 yrs.	38	21.2	19	28.4	5	19.2
11-15 yrs.	34	19.0	13	19.4	2	7.7
16+ yrs.	27	15.1	4	6.0	2	7.7
Total	**179**	**100.0**	**67**	**100.0**	**26**	**100.0**
Years Administering Special Education						
1-3 yrs.	32	17.6	11	16.4	16	59.3
4-5 yrs.	28	15.4	9	13.4	5	18.5
6-10 yrs.	41	22.5	20	29.9	3	11.1
11-15 yrs.	38	20.9	15	22.4	1	3.7
16+ yrs.	43	23.6	12	17.9	2	7.4
Total	**182**	**100.0**	**67**	**100.0**	**27**	**100.0**

Source. Special Education Administrator Questionnaire.
Note. For traditional schools, there were 344 single districts and 131 SSAs surveyed. There were 160 single charter schools surveyed.

Special education administrators in single district charter schools appeared to have less experience generally than those in traditional districts. The majority of charter school special education administrators had three or fewer years experience administering special education (59.3 percent), while the greatest proportion of traditional single district and SSA special education administrators had six or more years experience in this area (67.0 percent in single districts, 63.2 percent in SSAs).

Characteristics of Teachers and Other Professionals

Response Rates

Respondents to our teacher survey included 1,530 teachers in single districts (19.6 percent response rate), and 359 teachers working for SSAs or for SSA participant districts (26.2 percent response rate) (Table 2.9). Since the teachers working for SSAs or SSA participant districts would typically be assigned to a particular campus or campuses, we felt their perceptions would be framed similarly by the campus environment. Thus, we treated them as one group in our analyses.

Respondents to the survey of other special education professionals included 683 professionals in single districts (16.0 percent response rate), and 123 professionals in SSAs or SSA participant districts (19.3 percent response rate). Consistent with our treatment of special education teachers, other professionals in SSA participant districts and in positions staffed by SSAs were considered one group in our analyses.

Table 2.9. Response Rates for Surveys of Special Education Personnel

	Personnel Surveyed	Number of Respondents	Response Rate
Special Education Teachers Survey			
Single districts	7,821	1,530	19.6%
SSAs	1,370	359	26.2%
Total	**9,191**	**1,889**	**20.6%**
Other Special Education Professionals Survey			
Single districts	4,271	683	16.0%
SSAs	636	123	19.3%
Total	**4,907**	**806**	**16.4%**

Respondents' District and Individual Characteristics

We used two approaches to evaluating the representativeness of our special education teacher and other professional respondents. First, for teachers, we compared the student enrollment characteristics of the districts our respondents represented with the enrollment of the districts represented by the population of full-time special education teachers provided by TEA (PEIMS data). We also compared enrollment data for other professional respondents' districts with the districts represented by the population of full-time other special education professionals. Second, we compared the demographic characteristics of our respondents with the characteristics of their corresponding population. The survey respondents appeared to represent districts throughout the state, in terms of region and student demographic characteristics. In addition, they represented a variety of grade levels. At the individual level, special education teachers who responded to our survey were fairly similar to special education teachers, in general, in gender and ethnicity. The same was true for other special education professionals who responded to our survey. Based on these analyses, we believe the results of the teacher and other professional surveys may be generalized to their special education counterparts in Texas public schools.

To illustrate the representativeness of the survey respondents, we present data regarding district student enrollment and individual-level employee demographics. Tables summarizing data regarding grade level, regions of Texas, and student demographics represented by survey respondents are provided in Appendix A.

District-level characteristics. According to the TEA/PEIMS data system, full-time special education teachers were employed in 333 single districts (Table 2.10). Special education teachers responding to our survey represented 266 different districts, or 80 percent of all single districts. The proportion of districts represented by respondents in each enrollment category was quite similar to the proportion of districts overall. For example, 21.3 percent of the single districts had an enrollment of 3,000 to 4,999 students, while 21.8 percent of the single districts represented by respondents were in this enrollment category.

Table 2.10. District Enrollment Categories Represented by Special Education Teachers in Single Districts

Number of Students	All Single Districts		Districts Represented by Teacher Respondents	
	Number	Percent	Number	Percent
1-499 students	13	3.9	3	1.1
500-999 students	26	7.8	9	3.4
1,000-1,599	22	6.6	12	4.5
1,600-2,999	52	15.6	40	15.0
3,000-4,999	71	21.3	58	21.8
5,000-9,999	66	19.8	63	23.7
10,000-24,999	44	13.2	42	15.8
25,000-49,999	25	7.5	25	9.4
50,000 or more	14	4.2	14	5.3
Total	**333**	**100.0**	**266**	**100.0**

Source. TEA/AEIS data; Special Education Teacher Survey.
Note. The 1,530 survey respondents represented 266 different districts.

Full-time special education teachers in SSAs were employed in 596 districts (Table 2.11). Special education teachers respondents represented 220 different districts, or 37 percent of the districts. Each of the enrollment categories was represented by the teacher respondents. While the proportions of districts represented by respondents in each category were not the same as for all the districts, there appeared to be adequate representation within the respondent group.

Table 2.11. District Enrollment Categories Represented by Special Education Teachers in SSAs

Number of Students	All SSA Participant Districts		Districts Represented by Teacher Respondents	
	Number	Percent	Number	Percent
1-499 students	219	36.7	34	15.5
500-999 students	182	30.5	70	31.8
1,000-1,599	102	17.1	52	23.6
1,600-2,999	69	11.6	44	20.0
3,000-4,999	16	2.7	14	6.4
5,000-9,999	6	1.0	4	1.8
10,000-24,999	1	0.2	1	0.5
25,000-49,999	1	0.2	1	0.5
Total	**596**	**100.0**	**220**	**100.0**

Source. TEA/AEIS data; Special Education Teacher Survey.
Note. The 359 survey respondents represented 220 different districts.

Based on TEA/PEIMS data, full-time other special education professionals were employed in 290 single districts (Table 2.12). Survey respondents represented 180 different districts, or 62 percent of all single districts. The pattern of districts in each enrollment category represented by respondents was very similar to the proportion of districts overall. As an example, 20.0 percent of the single districts had an enrollment of 3,000 to 4,999 students, while 18.9 percent of the single districts represented by respondents were in this enrollment category.

Table 2.12. District Enrollment Categories Represented by Other Special Education Professionals in Single Districts

	All Single Districts		Districts Represented by Other Professionals Respondents	
Number of Students	Number	Percent	Number	Percent
1-499 students	6	2.1	2	1.1
500-999 students	17	5.9	7	3.9
1,000-1,599	18	6.2	5	2.8
1,600-2,999	46	15.9	19	10.6
3,000-4,999	58	20.0	34	18.9
5,000-9,999	63	21.7	47	26.1
10,000-24,999	44	15.2	33	18.3
25,000-49,999	25	8.6	20	11.1
50,000 or more	13	4.5	13	7.2
Total	**290**	**100.0**	**180**	**100.0**

Source. TEA/AEIS data; Other Special Education Professionals Survey.
Note. The 683 single district respondents represented 180 different districts.

Other full-time special education professionals in SSAs were employed in 286 districts (Table 2.13). Respondents represented 87 different districts, or 30 percent of all districts. The proportion of districts represented by respondents in each enrollment category was similar to the proportion of districts in all but two categories. Specifically, there were fewer of the smaller districts (1 to 499 students), and more of the larger districts (3,000 to 4,999 students) represented by other special education professionals responding to the survey. In general, however, respondents' districts were representative of all SSA participant districts.

Table 2.13. District Enrollment Categories Represented by Other Special Education Professionals in SSAs

	All SSA Participant Districts		Districts Represented by Other Professionals Respondents	
Number of Students	Number	Percent	Number	Percent
1-499 students	61	21.3	9	10.3
500-999 students	87	30.4	24	27.6
1,000-1,599	64	22.4	21	24.1
1,600-2,999	50	17.5	17	19.5
3,000-4,999	16	5.6	10	11.5
5,000-9,999	6	2.1	5	5.7
10,000-24,999	1	0.3	0	0.0
25,000-49,999	1	0.3	1	1.1
50,000 or more	0	0.0	0	0.0
Total	**286**	**100.0**	**87**	**100.0**

Source. TEA/AEIS data; Other Special Education Professionals Survey.
Note. The 123 respondents represented 87 different districts.

Individual-level characteristics. The gender and ethnic characteristics of single district special education teachers responding to the survey were very similar to those of all special education teachers in single districts (Table 2.14). Specifically, 85.4 percent of the respondents, and 83.4 of all teachers were female.

In terms of ethnicity, a slightly larger proportion of respondents were white or Anglo than all teachers (78.6 percent of respondents, 71.4 percent of all special education teachers).

Table 2.14. Demographic Characteristics of Special Education Teachers in Single Districts

Characteristic	SpEd Teachers in All Single Districts		SpEd Teacher Respondents	
	Number	Percent	Number	Percent
Gender				
Female	16,376	83.4	1,307	85.4
Male	3,264	16.6	223	14.6
Ethnicity				
African American	2,406	12.3	122	8.0
Asian American	274	1.4	25	1.6
Hispanic American	2,862	14.6	173	11.3
Native American/ American Indian	74	0.4	8	0.5
White/Anglo American	14,024	71.4	1,202	78.6
Total	**19,640**	**100.0**	**1,530**	**100.0**

Source. TEA/PEIMS data; Special Education Teacher Survey.

In SSAs, special education teacher respondents were similar to teachers overall (Table 2.15). The proportion of female respondents was slightly larger than that for the special education teachers as a whole. This was also true for the proportion of white or Anglo teachers. For example, 89.1 percent of respondents, and 84.5 percent of all SSA teachers, were female; 94.7 percent of respondents, and 88.3 percent of all SSA teachers, were white or Anglo.

Table 2.15. Demographic Characteristics of Special Education Teachers in SSAs

Characteristic	SpEd Teachers in All SSA Participant Districts		SpEd Teacher Respondents	
	Number	Percent	Number	Percent
Gender				
Female	3,000	84.5	320	89.1
Male	551	15.5	39	10.9
Ethnicity				
African American	152	4.3	5	1.4
Asian American	8	0.2	1	0.3
Hispanic American	246	6.9	13	3.6
Native American/ American Indian	10	0.3	0	0.0
White/Anglo American	3,135	88.3	340	94.7
Total	**3,551**	**100.0**	**359**	**100.0**

Source. TEA/PEIMS data; Special Education Teacher Survey.

The single district and SSA respondent groups for the survey of other special education professionals were very similar to their populations (Tables 2.16 and 2.17), although slightly greater proportions of white or Anglo professionals responded than were in the general population of professionals.

Table 2.16. Demographic Characteristics of Other Special Education Professionals in Single Districts

Characteristic	Other SpEd Professionals in All Single Districts		Other SpEd Professionals Respondents	
	Number	Percent	Number	Percent
Gender				
Female	4,719	93.7	646	94.6
Male	315	6.3	37	5.4
Ethnicity				
African American	319	6.3	31	4.5
Asian American	41	0.8	5	0.7
Hispanic American	680	13.5	61	8.9
Native American/ American Indian	23	0.5	4	0.6
White/Anglo American	3,971	78.9	582	85.2
Total	**5,034**	**100.0**	**683**	**100.0**

Source. TEA/PEIMS data; Other Special Education Professionals Survey.

Table 2.17. Demographic Characteristics of Other Special Education Professionals in SSAs & SSA Participant Districts

Characteristic	Other SpEd Professionals in All SSA Participant Districts		Other SpEd Professionals Respondents	
	Number	Percent	Number	Percent
Gender				
Female	704	94.5	116	94.3
Male	41	5.5	7	5.7
Ethnicity				
African American	8	1.1	0	0.0
Asian American	1	0.1	0	0.0
Hispanic American	56	7.5	6	4.9
Native American/ American Indian	0	0.0	0	0.0
White/Anglo American	680	91.3	117	95.1
Total	**745**	**100.0**	**123**	**100.0**

Source. TEA/PEIMS data; Other Special Education Professionals Survey.

Summary and Conclusions

Overall, the administrators, special education teachers, and other special education professionals responding to our surveys appear to represent districts throughout Texas public schools in terms of location, size, and demographic composition of the student population. They also appear to be representative of special education personnel, generally. However, statewide staffing levels, vacancies, and other characteristics inferred from the current study are only estimates. Only a portion of the districts provided staffing data for the study, and the staffing levels and vacancy rates are estimates based on the data from those districts. In addition, the current study surveyed district-level administrators. Campus-level vacancy rates, turnover, and work conditions may vary from the district-level characteristics reported by these administrators. Given these limitations, we believe the results of the surveys presented in this report may be generalized to public schools in Texas.

3. Special Education Personnel Staffing Needs

In order to assess statewide personnel needs in special education, we surveyed human resource administrators at each school district in Texas, as well as administrators of special education Shared Service Arrangements (SSAs) statewide. These administrators provided full-time equivalent (FTE) staffing and vacancy information regarding special education positions funded by their district or SSA. They also provided information describing their recruitment and retention practices. This section of the report summarizes special education staffing levels for districts and SSAs responding to the survey, and provides estimates of statewide staffing levels for special education personnel.

Survey Respondents

We surveyed district human resource administrators at the 344 single districts in Texas, and at the 695 districts participating in a special education SSA. Altogether, 140 of the human resource administrators at single districts (40.7 percent), and 288 at districts participating in SSAs responded to the survey (41.4 percent). We also surveyed the special education administrators of the 131 SSAs and asked them to provide data for positions funded through their SSA. Forty-two of these administrators responded to the Human Resource Administrator Survey (32 percent). Our intent was to obtain an estimate of staffing and vacancies for special education positions funded by both the district and the SSA.

The sections below summarize positions and shortages for all responding districts. (Tables reporting data separately for single districts, SSA participant districts, and SSAs are presented in Appendix B.)

Positions and Shortages

Special Education Teachers

Overall, districts responding to the human resource survey funded about 11,370 FTE special education teacher positions (Table 3.1). Half of the total teacher positions (50.1 percent) were allocated for teachers working with students in resource and/or content mastery. The next greatest numbers of positions were allocated for teachers working with students who have moderate to severe disabilities (i.e., Life Skills classes), and teachers who work with students with a variety of disabilities. In all, these three teacher categories represented 8,289 FTE positions (72.9 percent of all teacher positions).

The greatest numbers of special education teacher vacancies were in the areas of resource and/or content mastery, working with students who have adaptive behavior issues (emotional disturbances), and working with students who have moderate to severe disabilities (approximately 342 total FTE vacancies). The vacancy rates for each of the teacher positions were below 10 percent, varying from 2.4 percent to 8.5 percent. While our survey did not provide turnover data by specific teaching position, it is possible that turnover in some of the positions was much greater than in others, contributing to relatively higher vacancy rates.

Table 3.1. Teacher Positions and Vacancy Rates

Special Education Teachers Working Primarily With:	Total FTE Reported	Total Vacancy FTE Reported	Total Vacancy Rate (%)
Students in resource and/or content mastery	5,690.3	226.9	4.0
Students who have moderate to severe disabilities (i.e., Life Skills classes)	1,565.5	50.0	3.2
Students who have a variety of disabilities (various teacher assignments)	1,033.2	36.5	3.5
Students ages 3-5 (i.e., Preschool Program for Children with Disabilities)	854.6	24.0	2.8
Students who have emotional disturbances (adaptive behavior issues)	762.8	65.0	8.5
Students who have limited English proficiency (i.e., dual certified teachers)	579.3	14.0	2.4
Students who have auditory impairments	249.7	15.0	6.0
Students in home-based settings	224.0	11.5	5.1
Students who have visual impairments	209.2	9.0	4.3
Students who have autism	201.1	9.0	4.5
Totals	**11,369.7**	**460.9**	**4.1**

Source. Human Resource Administrator Survey.
Note. Data was provided by 140 single districts, 288 SSA participant districts, and 45 SSAs.

Given the vacant FTE positions reported, the most critical shortage in special education teachers is for special education teachers working with students in resource and/or content mastery. Anecdotal evidence from open-ended survey questions suggests that this may be a function of the increased standards requiring special education teachers to be "highly qualified" in core subject areas.

Although respondents reported less than 100 total FTE vacancies for teachers working with students who have adaptive behavior issues, the vacancy rate for this position is the highest among all the teaching positions. Thus we believe, this teaching position is a potential critical shortage area that merits close monitoring in the future.

Other Special Education Professionals

Almost three-fourths of the 3,993 special education professional FTE positions reported in the current study were for educational diagnosticians and speech language pathologists (Table 3.2). Including bilingual and English-only positions, 38.1 percent of the other professional positions were for educational diagnosticians, and 36.3 percent were for speech language pathologists. The greatest numbers of vacancies were for the speech language pathologists, English-only (115); there were also many vacancies for English-only educational diagnosticians (84). While the number of FTE positions and vacancies was low for bilingual speech language pathologists and for bilingual licensed specialists in school psychology, the vacancy rates for these two positions were several times greater than any of the special education teacher positions (19.1 percent for bilingual speech pathologists, and 14.5 percent for bilingual licensed specialists in school psychology). These rates may signal positions where special education staffing needs are growing. Retaining personnel in these positions, and identifying qualified personnel not currently in the workforce, may be critical staffing strategies for these positions until more professionals are trained in these fields.

Table 3.2. Other Special Education Positions and Vacancy Rates

Position	Total FTE Reported	Total Vacancy FTE Reported	Total Vacancy Rate (%)
Other Special Education Professionals			
Educational diagnosticians	1,364.8	84.4	6.2
Bilingual educational diagnosticians	156.7	12.3	7.8
Speech language pathologists	1,341.0	115.0	8.6
Bilingual speech language pathologists	110.0	21.0	19.1
Specialists in school psychology	317.6	15.0	4.7
Bilingual specialists in school psychology	41.5	6.0	14.5
Sign language interpreters	223.5	22.0	9.8
Occupational therapists	212.7	9.0	4.2
Physical therapists	146.5	11.5	7.8
Orientation and mobility specialists	78.4	4.5	5.7
Totals	**3,992.8**	**300.6**	**7.5**
Special Education Paraprofessionals			
Totals	**8,919.0**	**283.5**	**3.2**

Source. Human Resource Administrator Survey.
Note. Data was provided by 140 single districts, 288 SSA participant districts, and 45 SSAs.

Special Education Paraprofessionals

A great number of special education paraprofessionals were employed statewide (8,919) during the last school year. Although the vacancy rate for this position was low (3.2 percent), it represented several hundred unfilled positions (approximately 284). This may be an area of future growth in staffing as districts seek to provide additional support for general and special education teachers.

Statewide Staffing and Vacancy Levels

Our analyses of survey respondents and non-respondents indicated that the respondent districts were similar to the overall group of Texas public school districts we surveyed. Therefore we felt the staffing data provided by respondent districts would be representative of all Texas schools. In order to estimate the number of special education positions statewide, we looked at the degree to which respondent districts represented the districts surveyed in terms of total student enrollment: Single district respondents represented 34 percent of all single district enrollment; SSA participant district respondents represented 40 percent of all SSA participant districts' enrollment; and SSA respondents represented 32 percent of SSA enrollment. We used these proportions to weight reported special education teacher and other professional FTE positions and vacancies reported in our Human Resource Administrator survey.

Our estimates may underrepresent actual positions and vacancies due to a number of factors, particularly (1) enrollment and related data for two districts were not available in the Academic Excellence Indicator System (AEIS), and (2) some respondents indicated their district funded various positions, however, they did not report the number of positions funded. Based on our weighted calculations, we estimate that there were 69,840 positions in special education in Texas public schools (excluding charter schools and alternative education programs) at the time of the surveys (Table 3.3). Almost half (46.6 percent) were teacher FTE positions, one-sixth were other professional FTE positions (16.6 percent), and the remainder were paraprofessional positions (36.8 percent).

Estimates indicate the most FTE teaching positions statewide in special education were allocated to working with students in resource and/or content mastery (16,270), and secondarily to working with students who have moderate to severe disabilities (4,495). Significant numbers of positions were also allocated statewide to working with students who have a variety of disabilities (2,963), students ages 3 to 5 (2,454), students who have adaptive behavior issues (2,204), and students with disabilities who have limited English proficiency (1,630). The greatest number of FTE positions for other special education professionals were allocated for educational diagnosticians, English-only and bilingual (4,438), and speech language pathologists, English-only and bilingual (4,222). There were also a substantial number of FTE positions for special education paraprofessionals (25,677).

Based on our analysis, seven positions had 100 or more estimated FTE vacancies statewide:

- Teachers working with students in resource and/or content mastery (644 estimated vacancies),
- Teachers working with students who have adaptive behavior issues (189),
- Teachers working with students who have moderate to severe disabilities (142),
- Teachers working with students who have a variety of disabilities (105),
- Speech language pathologists, English-only (338),
- Educational diagnosticians, English-only (248), and
- Special education paraprofessionals (810).

In summary, the most critical shortages statewide appear to be for teachers working with students in resource and/or content mastery, and potentially for teachers working with students who have adaptive behavior issues. Critical shortages in other special education professional positions exist for educational diagnosticians and speech language pathologists. Based on an analysis of vacancy rates, there is an emerging need for bilingual speech language pathologists and for bilingual licensed specialists in school psychology. The greatest number of vacancies by position was reported for paraprofessionals.

Table 3.3. Statewide Estimates of Special Education Positions and Vacancy Rates

Position	Total FTE Estimated	Total Vacancy FTE Estimated	Estimated Vacancy Rate (%)
Special Education Teachers Working Primarily with:			
Students in resource and/or content mastery	16,270	644	4.0
Students who have moderate to severe disabilities (i.e., Life Skills classes)	4,495	142	3.2
Students who have a variety of disabilities (various teacher assignments)	2,936	105	3.6
Students ages 3-5 (i.e., Preschool Program for Children with Disabilities)	2,454	68	2.8
Students who have emotional disturbances (adaptive behavior issues)	2,204	189	8.6
Students who have Limited English Proficiency (i.e., dual certified teachers)	1,630	39	2.4
Students who have auditory impairments	723	44	6.1
Students in home-based settings	651	34	5.2
Students who have visual impairments	607	26	4.3
Students who have autism	575	26	4.6
Totals	**32,546**	**1,316**	**4.0**
Other Special Education Professionals			
Educational diagnostician	3,981	248	6.2
Bilingual educational diagnostician	457	35	7.7
Speech language pathologist, licensed or certified	3,903	338	8.7
Bilingual speech language pathologist, licensed or certified	319	61	19.1
Licensed specialist in school psychology	920	45	4.9
Bilingual licensed specialist in school psychology	120	18	14.7
Sign language interpreter	652	64	9.8
Occupational therapist	617	27	4.3
Physical therapist	422	34	8.0
Orientation and mobility specialist	226	13	5.6
Totals	**11,617**	**881**	**7.6**
Special Education Paraprofessionals			
Totals	**25,677**	**810**	**3.2**

Source. Human Resource Administrator Survey.

Note. Estimates are based on degree to which respondents represented districts surveyed with regard to student enrollment. For example, the 140 respondents to the single district survey represented 34 percent of all student enrollment in single districts. So we multiplied the reported number of FTE positions by 2.94 to obtain an estimate of 100 percent of FTE positions for single districts. The 288 respondents to the SSA participant district survey represented 40 percent of student enrollment for all SSA participant districts. The 45 respondents to the SSA survey represented 32 percent of student enrollment for all SSA participant districts.

Staffing Trends

Teachers. To identify trends emerging over the past four years, we compared single district data from the present study with the results of our previous special education personnel needs assessment in 2001 (Texas Center for Educational Research. (2001).

In the 2001 needs assessment, teaching positions in resource and/or content were reported along with teachers of students with autism, students with a variety of disabilities, and students in home-based settings. Combining data for these positions for 2005, we found that the greatest number of positions were allocated for the same two teacher positions in 2005 and 2001:

- teachers in the combined category with resource and/or content mastery (60.6 percent of positions in 2001, and 62.8 percent in 2005),
- teachers working with students who have moderate to severe disabilities (13.9 percent of positions in 2001, and 13.8 percent in 2005).

However, there were fewer positions allocated to teaching students with adaptive behavior issues in 2005 (10.8 percent of teaching positions in 2001, and 6.7 percent of positions in 2005). And there were more positions allocated to working with students with limited English proficiency in 2005 (2.1 percent of positions in 2001, and 5.1 percent of positions in 2005). Thus, it appears that there are more students needing assistance with English language, and fewer students needing assistance with adaptive behavior issues. Given the higher vacancy rates for both years for teachers working with students who have adaptive behavior issues, this area remains a critical shortage area (8.7 percent vacancies in 2001, and 8.5 percent in 2005).

Overall, the vacancy rate for special education teachers in single districts in 2005 was slightly lower than the rate in 2001 (4.9 percent in 2001 and 4.1 percent in 2005). This may be due to the trend toward relatively fewer vacancies in 2005 for all but three of the teacher positions.Vacancy rates stayed about the same for two of the teacher positions: teachers in the combined teaching category with resource and/or content mastery (3.6 percent vacancies in 2001, and 3.4 percent in 2005), and teachers working with students with adaptive behavior issues (8.7 percent vacancies in 2001, and 9.0 percent in 2005). Vacancy rates for teachers working with students who have auditory impairments increased (from 2.6 percent in 2001 to 6.4 percent in 2005); however, the total number of vacancies was small (6 FTE vacancies in 2001, and 13 FTE in 2005).

Other Professionals. In comparing data for other special education professionals, we found that English-only speech language pathologists and educational diagnosticians comprised the greatest number of positions in both 2005 and 2001. The vacancy rate for all professionals was similar across the two studies (6.7 percent vacancies in 2001, and 7.5 percent in 2005). However, for two positions, the vacancy rates in 2005 were much higher than in 2001:

- bilingual speech language pathologists (9.1 percent vacancies in 2001, and 18.7 percent in 2005), and
- bilingual licensed specialists in school psychology (2.9 percent vacancies in 2001, and 13.3 percent in 2005).

As noted above, this may be an emerging growth area in special education personnel staffing. The large increase in the vacancy rates for these positions over the past four years may also signal the development of recruitment and retention issues that need to be addressed.

For special education paraprofessionals, the overall number of single district positions was comparable for both study years. Specifically, for 2001, 38.7 percent of all special education positions were allocated for paraprofessionals; 37.8 percent of all positions were paraprofessionals in 2005. In addition, the total vacancy rates for 2005 and 2001 were quite similar (2.9 percent vacancies in 2001, and 3.1 percent in 2005).

Overall, the key shortage areas in special education positions remained the same from 2001 to 2005:

- teachers in resource and/or content mastery;
- teachers working with students who have adaptive behavior issues;
- speech language pathologists, English-only, and
- educational diagnosticians, English-only.

However, in the current study, emerging needs were noted for bilingual speech pathologists and for bilingual specialists in school psychology. Consistent with the findings in 2001, the large number of special education paraprofessional positions and the number of vacancies reported make this a critical shortage area for 2005 as well.

Types of Positions Funded

Districts and SSAs appear to differ in the numbers and types of special education positions they staff (i.e., teachers, other professionals, paraprofessionals). This section summarizes the types of positions funded by single districts, by districts participating in an SSA, and by SSAs (Figures 3.1 and 3.2).

Single Districts

Overall, single districts participating in the survey funded a total of 8,635 FTE teaching positions in special education. More than three-quarters of the responding single districts funded special education teaching positions to work primarily with preschool children with disabilities, students with adaptive behavior issues, students with moderate to severe disabilities, and students in resource and/or content mastery classrooms. About half of the districts funded positions working with students with visual impairments, with a variety of disabilities, or students in home-based settings. One-third of the districts indicated they funded special education teachers to work with disabled students who have limited English proficiency, or with students who have auditory impairments.

We compared the proportion of districts funding various types of positions in 2005 with those funding positions in 2001 as reported in our previous special education personnel needs assessment (TCER, 2001). While the districts that responded to the 2001 and the 2005 surveys differed, each survey obtained a group of respondents that was representative of public schools in Texas. The percentage of single districts funding teacher positions to work with disabled students who have limited English proficiency more than doubled from 2001 to 2005 (15.1 percent of districts in 2001, and 34.6 percent in 2005).

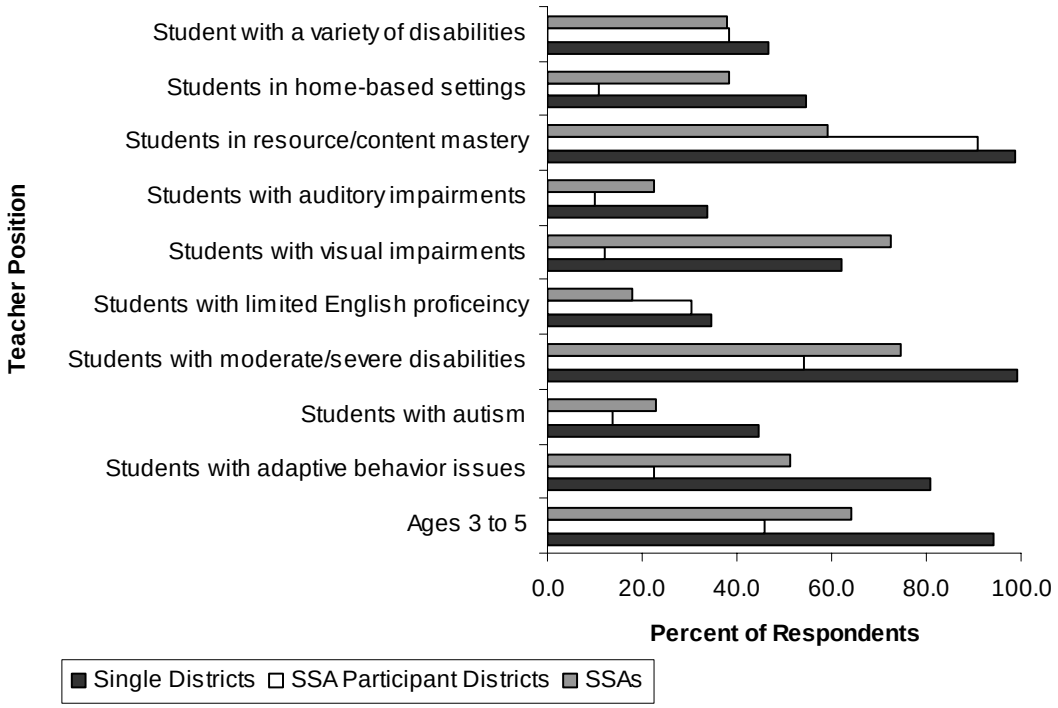

Figure 3.1. Proportion of respondents funding teacher positions.

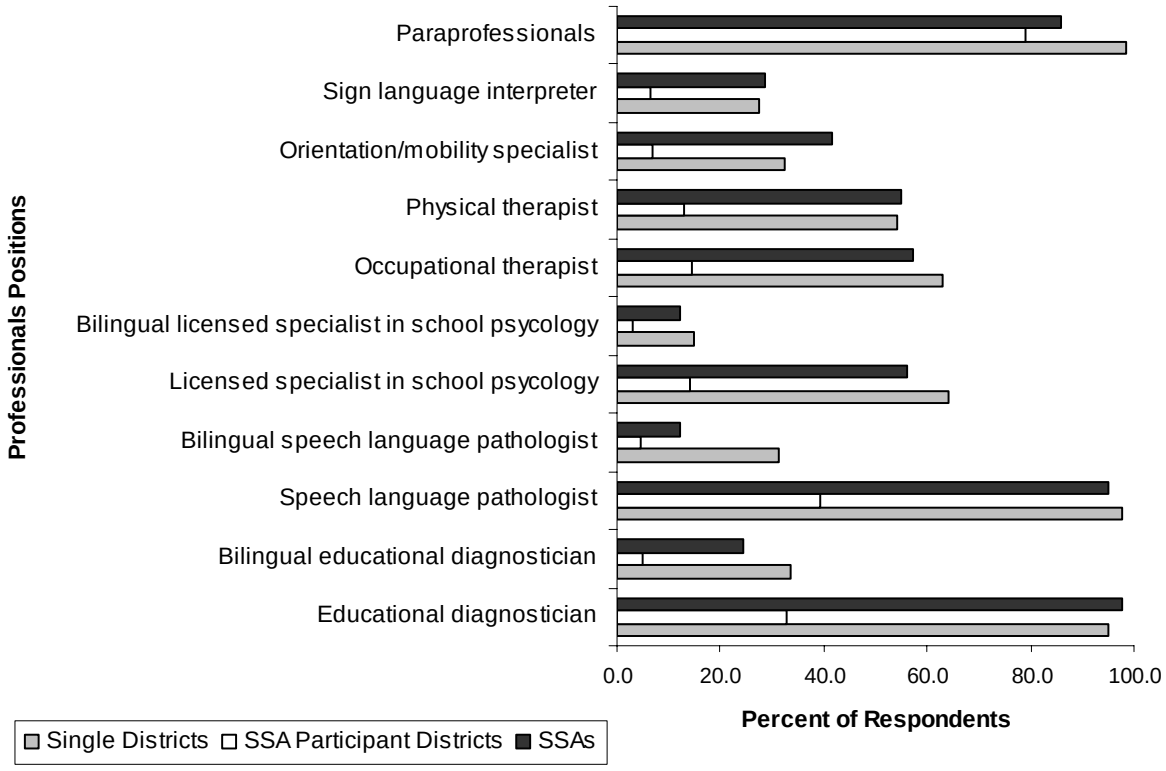

Figure 3.2. Proportion of respondents funding other professional positions.

Almost all single districts reported hiring educational diagnosticians and speech language pathologists. More than half reported funding licensed specialists in school psychology, occupational therapists, and physical therapists. About one-third of the districts funded bilingual educational diagnosticians, bilingual speech language pathologists, orientation and mobility specialists, and sign language interpreters. Approximately 15 percent of the single districts funded bilingual licensed specialists in school psychology. Almost all single districts reported having special education paraprofessional positions. This pattern of professional and paraprofessional positions funded by single districts in 2005 was very similar to that present in 2001.

SSA Participant Districts

Almost all of the SSA participant districts funded teachers in resource and/or content mastery in 2005. About half reported funding teachers for students with moderate to severe disabilities, and students aged three to five years. One-third of the SSA participant districts funded speech language pathologist and educational diagnostician positions, and slightly more than three-quarters funded special education paraprofessional positions. Staffing data were not reported in the 2001 special education study for district-funded positions in districts that participated in an SSA.

Special Education SSAs

For SSAs, two-thirds to three-quarters of the administrators reported funding teachers for students with moderate to severe disabilities, teachers for students who have visual impairments, teachers of students aged three to five years, and teachers in the resource and/or content mastery and other areas. About half of the SSAs funded teachers for students who have emotional disturbances. A lower percentage of SSAs funded each teacher position in 2005 compared to 2001. However, the differences were greatest for three positions:

- teachers of students aged three to five years (89.0 percent of SSAs funded these in 2001, and 64.1 percent in 2005),
- teachers in resource and/or content mastery and those working with students who have a variety of disabilities (84.2 percent of SSAs funded these in 2001, and 59.0 percent in 2005),
- teachers working with students who have moderate to severe disabilities (91.8 percent of SSAs funded these in 2001, and 74.4 percent in 2005).

Almost all of the SSAs reported funding educational diagnostician and speech language pathologist positions. About half of the SSA respondents funded licensed specialists in school psychology, occupational therapists, and physical therapists, and orientation and mobility therapists. Comparing the current findings to those obtained in 2001, we found that the proportion of SSAs that funded educational diagnostician, speech language pathologist, and licensed specialist in school psychology positions was very similar. However, there were two positions that were funded by a much smaller percentage of SSAs in 2005 compared to 2001:

- occupational therapists (77.3 percent of SSAs funded these in 2001, compared to 57.1 percent in 2005), and
- physical therapists (67.6 percent of SSAs funded these in 2001, compared to 54.8 percent in 2005).

For bilingual licensed specialists in school psychology, a greater proportion of SSAs funded this position in 2005 compared to 2001 (8.5 percent of SSAs funded these in 2001, and 12.9 percent in 2005). For the

remaining special education professional positions, and for the paraprofessional positions, the proportion of SSAs that funded these positions was smaller in 2005 than in 2001.

Overall, the data reinforce the observation that there is a growing need for bilingual special education positions, and a continued focus on staffing educational diagnostician and speech language pathologist positions. In addition, there is an emerging need for special education teachers for students with limited English proficiency.

Staffing by Funding Source

Positions Funded by Districts, SSA Participant Districts, and SSAs

We looked at the relative numbers of positions funded by single districts, by districts participating in a special education SSA, and by the SSAs. Overall, the single districts were responsible for the majority of the FTE positions funded in special education statewide (Figures 3.3, 3.4, and 3.5). Three-fourths of the teacher positions were funded by single districts (8,635), and most of the remaining teacher positions were funded by districts participating in a special education SSA (2,220). SSAs were responsible for only 4.5 percent of special education teaching positions (515).

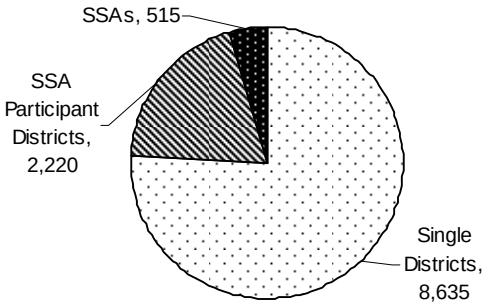

Figure 3.3 Special education teacher positions by funding source.

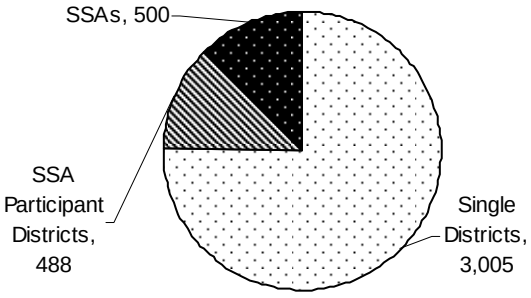

Figure 3.4 Other special education professional positions by funding source.

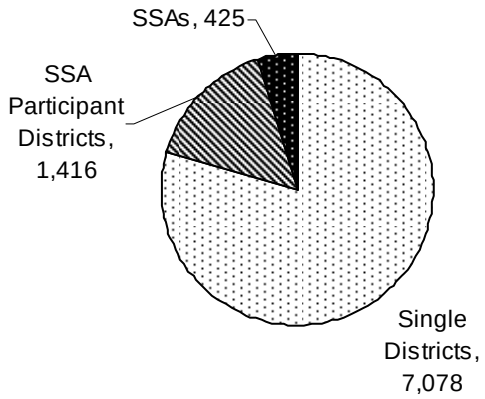

Figure 3.5 Special education paraprofessional positions by funding source.

Similarly, three-fourths of the special education professional positions were funded by single districts (3,005). However, SSAs (funding 500 positions) and districts participating in SSAs (funding 488 positions) appeared to share equally the remainder of the special education professional FTE positions.

More than three-quarters of the special education paraprofessional FTE positions were funded by single districts (7,078), and most of the remaining positions were funded by districts participating in SSAs (1,416). SSAs were responsible for only 4.8 percent of total paraprofessional positions reported (425).

Staffing Emphasis within Funding Source

For single districts, the majority of FTE positions in special education were teachers (8,635) and paraprofessionals (7,078); the remainder were other special education professionals (3,005) (Table 3.4).

For districts participating in an SSA, positions funded were primarily teachers (2,220) and paraprofessionals (1,416). About 488 special education professional positions were also funded by these districts.

About 515 teacher FTE positions and about 500 other professional FTE positions were funded by SSAs; about 425 special education paraprofessional FTE positions were funded by SSAs. Thus the SSAs appeared to focus equally on each of the three staff groups in number of positions funded. They seem to provide a variety of teacher positions, and support their participant districts with additional professionals and paraprofessionals.

Overall, the single districts were responsible for a great majority of the FTE positions funded in special education statewide. SSA participant districts appeared to hire special education teachers and other professionals. They relied on their SSA to supplement teaching and paraprofessional staff to a small degree, and to supply additional other special education professionals.

Table 3.4. Special Education Staffing by Funding Source

Special Education Positions	Single Districts		Districts Participating in an SSA		SSAs	
	Number	Percent	Number	Percent	Number	Percent
Teachers	8,635	46.1	2,220	53.8	515	35.8
Other professionals	3,005	16.1	488	11.8	500	34.7
Paraprofessionals	7,078	37.8	1,416	34.3	425	29.5
Total	**18,717**	**100.0**	**4,124**	**100.0**	**1,417**	**100.0**

Source. Human Resource Administrator Survey.

Personnel Turnover

Administrators responding to our survey compared the number of personnel who left their jobs after the 2003-04 school year with the number of personnel employed, and estimated turnover rates for both teachers and other professionals in special education positions.

The average special education teacher turnover for all three funding sources was about 14.8 percent. Human resource administrators of single districts reported teacher turnover ranging from zero to 75 percent for their district. The mean turnover rate for these districts was 13.2 percent. For SSA participant districts, turnover rates ranged from zero to 100 percent for teacher positions, with a mean of 15.7 percent. And in SSAs, turnover rates for teachers ranged from zero to 60 percent, with a mean of 12.9 percent.

Overall turnover for other special education professionals was approximately 12.0 percent. Human resource administrators in single districts reported turnover for professionals ranging from zero to 100 percent, with a mean turnover rate of 12.3 percent. For SSA participant districts, turnover rates varied from zero to 54 percent for professionals, with a mean of 11.4 percent. In SSAs, turnover rates for professionals ranged from zero to 62 percent. The mean turnover rate for professionals funded by SSAs was 14.5 percent.

Trends. Similar to the current study, turnover rates were reported by human resources directors in the first special education needs assessment conducted by TCER in 2001. The data suggest that turnover has increased slightly over the past four years (Table 3.5). For example, the proportion of single districts reporting turnover greater than 25 percent for special education teachers increased from 5.8 percent in 2001, to 8.7 percent in 2005. The proportion of SSA participant districts reporting turnover from 26 to 50 percent for teachers increased from 8.3 percent in 2001, to 15.9 percent in 2005. Similarly, the proportion of single districts reporting turnover from 26 to 50 percent for other special education professionals increased from 4.3 percent in 2001, to 10.1 percent in 2005.

Table 3.5. Turnover Rates by Percentile

	Single Districts		SSA Participant Districts		SSAs	
Turnover Percentile	Percent of Districts in 2001	Percent of Districts in 2005	Percent of Districts in 2001	Percent of Districts in 2005	Percent of SSAs in 2001	Percent of SSAs in 2005
Special Education Teacher Positions						
Less than 15%	66.9	62.3	73.6	63.5	--	57.6
15 to 25%	27.3	29.0	15.0	15.5	--	30.3
26 to 50%	5.0	6.1	8.3	15.9	--	9.1
51 to 75%	0.8	2.6	1.2	1.5	--	3.0
More than 75%	0.0	0.0	1.8	3.7	--	0.0
Totals	**100.0**	**100.0**	**100.0**	**100.0**	--	**100.0**
Other Special Education Professional Positions						
Less than 15%	72.2	67.9	79.8	85.7	--	61.5
15 to 25%	22.6	20.2	13.0	4.8	--	23.1
26 to 50%	4.3	10.1	5.8	6.1	--	12.8
51 to 75%	0.0	0.0	0.4	0.4	--	2.6
More than 75%	0.9	1.8	1.1	0.0	--	0.0
Totals	**100.0**	**100.0**	**100.0**	**100.0**	--	**100.0**

Source. 2001 Human Resource Survey, 2005 Human Resource Administrator Survey.
Note. 2001 survey respondents for teacher positions (single districts=212, SSA participant districts=326); and for other professional positions (single districts=115, SSA participant districts=277); turnover rates for SSAs were not available. 2005 survey respondents for teacher positions (single districts=114, SSA participant districts=271, SSAs=33); and for other professional positions (single districts=109, SSA participant districts=231; SSAs=39).

These turnover rates are similar to the 14.3 percent turnover reported by TEA for all teachers in Texas schools in 2003-04 (AEIS). However, there was a wide range of turnover rates experienced by the respondent districts, suggesting that turnover rates for particular special education positions may vary greatly as well. These special education positions in particular may have higher turnover rates than the overall special education or statewide teacher turnover rates.

Work Destination of Leavers

In order to ascertain the opportunities enticing special education personnel to leave their jobs, we developed a list of potential destinations for job leavers based on the teacher turnover literature. We asked *human resource administrators* to select the three most common work destinations for special education personnel who left their jobs after the 2003-04 school year. (A complete list of destinations selected as most common is reported in the tables in Appendix B.)

Teachers

Overall, the primary destination of teachers who left their jobs was to take another special education teaching position in a different school district (Table 3.6). The next most common destinations were relocation to another community and retirement. These two destinations were equally desirable in SSA participant districts, but in single districts and in SSA funded positions, relocating was more common than retiring. There were several destinations selected by administrators as typical for their teachers, but less common overall. For example, in single districts some teachers had selected a teaching position outside special education (i.e., in general education), an administrative position, or to stay at home after leaving their jobs. In SSA participant districts, some teachers had taken a general education teaching position in either the same or a different district.

There were some differences in destinations of teachers who left positions in single districts compared to those who left other positions. Specifically, teachers who left SSA participant districts appear to have taken a position in general education more often than teachers in single districts or in SSAs, and were not as likely to relocate or retire.

Table 3.6. Administrator Assessments of Most Common Work Destinations for Special Education Teachers Who Left the Job

	Single Districts		SSA Participants		SSAs	
Work Destination of Leavers	Number	Percent	Number	Percent	Number	Percent
Special education teaching in another LEA	106	84.1	112	65.1	21	77.8
Relocating to another community	67	53.2	48	27.9	13	48.2
Retiring	47	37.3	45	23.2	9	33.3
Teaching outside special education in LEA	28	22.2	30	17.4	6	22.2
Attending to home and/or family	26	20.6	23	13.4	3	11.1

Source. Human Resource Administrator Survey.
Note. LEA refers to Local Educational Agency. Survey respondents included 126 from single districts, 172 from SSA participant districts, and 42 from SSAs).

Other Special Education Professionals

The descriptions of potential work destinations for job leavers were worded the same for both special education teachers and other professionals. We anticipated that administrators would substitute "professional" for "teaching" in these items. While it is possible that some of the other professionals who left their jobs may have chosen to take a special education teaching position, this seems unlikely. Therefore, the most common destination for professionals—taking a special education teaching position in another LEA (Local Educational Agency), should be interpreted as taking another special education professional position in another LEA or district.

The three most common destinations for other special education professionals were a position in another district, relocation to another community, and retirement (Table 3.7). There were several less common, but often mentioned destinations as well. In single districts, some other professionals took a position in a public or private agency or hospital, or chose to stay at home. In SSA participant districts, some other professionals had taken a position outside of special education, a position outside of the education field, or returned to school. In SSA funded positions, some other professionals left their jobs for an administrative position, a position in a public or private agency or hospital, or a position outside of education.

Other professionals in SSA participant districts were somewhat less likely to relocate compared to professionals in single districts and in positions funded by SSAs. Other professionals in SSA funded positions were somewhat more likely to retire than the professionals in single and SSA participant districts.

Table 3.7. Administrators Assessments of Most Common Work Destinations for Other Special Education Professionals Who Left the Job

	Single Districts		SSA Participants		SSAs	
Work Destination of Leavers	Number	Percent	Number	Percent	Number	Percent
Special education teaching in another LEA	55	54.5	28	45.9	13	46.4
Relocation to another community	51	50.5	21	34.4	16	57.1
Retirement	33	32.7	20	32.8	12	42.9

Source. Human Resource Administrator Survey.
Note. LEA refers to Local Educational Agency. Survey respondents included 101 from single districts, 61 from SSA participant districts, and 28 from SSAs).

Trends

The special education personnel needs assessment conducted by TCER in 2001 also looked at destinations of job leavers. Although destinations were reported for teachers and other professionals combined, rather than separately like the current study, the overall pattern of most common work destinations for special education personnel was similar for both studies. A special education job in another district was the primary destination of job leavers in special education in 2001 and in 2005. Relocation to a new community and retirement were also among the most common destinations for both studies. A job outside of special education in the same district was a more popular destination for leavers in 2001 than in 2005. Given the possibility that taking a job outside special education may have included taking an administrative position in the 2001 study, the data regarding these destinations is more difficult to interpret.

Summary and Conclusions

The most critical shortages appear to be for teachers working with students in resource and/or content mastery, and potentially for teachers working with students who have adaptive behavior issues. Critical shortages in special education professional positions exist for educational diagnostician and speech language pathologist positions. There is an emerging need for bilingual speech language pathologists and bilingual licensed specialists in school psychology. The greatest number of vacancies by position was reported for paraprofessionals, and this may signal an area for closer study in the future.
We estimate that there were 69,840 positions in special education in Texas public schools (excluding charter schools) at the time of the surveys. About 47 percent were teacher FTE positions, about 17 percent were professional FTE positions, and the remainder were paraprofessional positions (about 37 percent).

Single districts funded the majority of the positions with SSAs supplementing staffing for their participating districts. The most teaching positions statewide in special education were allocated to working with students in resource and/or content mastery, and secondarily to working with students who have moderate to severe disabilities. Significant numbers of positions were also allocated statewide to working with students who have a variety of disabilities, students ages 3 to 5, students who have adaptive behavior issues, and students with disabilities who have limited English proficiency. The most positions for other professionals were allocated for educational diagnosticians and speech language pathologists.

Turnover for special education personnel overall continues to be an important issue in special education staffing. The overall turnover rates for teachers and other professionals in special education are close to the average for teachers in Texas. However, turnover rates for individual districts range greatly, and it is possible that there are different turnover rates for the various teacher and professional positions. This may be an area for future research.

Human resource administrators reported the most common destination for special education teachers who left their job after the 2003-04 school year was a special education teaching position in another school district. Teachers also left their jobs to relocate to another community, or to retire. For other special education professionals who left their jobs, all three of these destinations were important. Districts may be able to reduce turnover and vacancy rates by continuing to retain special education personnel who are near retirement. In addition, districts that work with special education personnel to make job conditions more attractive may be able to influence relocation decisions, and thereby reduce turnover.

4. Hiring Special Education Teachers and Other Special Education Professionals

As an assessment of the extent to which various recruitment and staffing strategies were used in single districts, SSA participant districts, and SSAs, we surveyed both human resource administrators and special education administrators. As noted in Section 2, respondents to the Human Resource Administrator Survey included 140 single district administrators (40.7 percent response rate), 288 SSA participant district administrators (41.4 percent), and 42 SSA administrators (32.1 percent). Respondents to the Special Education Administrator Survey included 184 single district administrators (53.5 percent), and 68 SSA administrators (51.9 percent). Our analyses of respondents and non-respondents indicated that respondent districts appear to be very similar to the districts surveyed as a whole. Thus, we believe the results of the current study may be generalized to public schools in Texas.

This section summarizes barriers to hiring personnel and common recruitment and staffing strategies used to address special education personnel staffing shortages. We also identify recent trends in staffing strategies since 2001.

Difficulty in Hiring Personnel

To ascertain the degree to which districts were able to adequately staff their special education programs, we asked *human resource administrators* whether or not their districts were having difficulty hiring special education personnel (Table 4.1). About half of the single district respondents (51.3 percent) and one-fourth of the SSA participant districts (23.9 percent) indicted they were having difficulty. Human resource administrators in SSA participant districts may have perceived less difficulty due to their reliance on the SSA to fill specialized positions. This seems reasonable since almost two-thirds (62.5 percent) of the SSAs reported difficulty in hiring special education personnel.

Table 4.1. Administrators Reporting Difficulty in Hiring Special Education Personnel

	Single Districts Percent	SSA Participant Districts Percent	SSAs Percent
Human Resource Administrators			
Teachers & other professionals	51.3	23.9	62.5
Special Education Administrators			
Teachers	38.9	--	45.0
Other professionals	70.5	--	73.0

Sources. Human Resource Administrator Survey, Special Education Administrator Survey.
Note. Human resource administrator respondents include single districts (136 for teachers, 136 for other professionals), SSA participant districts (281 for teachers, 263 for other professionals), and SSAs (36 for teachers, 39 for other professionals). Special education administrator respondents include single districts (175 for teachers, 176 for other professionals), and SSAs (60 for teachers, 63 for other professionals).

Almost three-quarters of the single district *special education administrators* (70.5 percent) and SSA administrators (73 percent) reported that they were having difficulty hiring other special education professionals. On the other hand, less than half of the single district administrators (38.9 percent) and of the SSA administrators (45.0 percent) reported difficulties in hiring special education teachers. While

special education administrators perceived less difficulty in hiring teachers, their responses along with the vacancy data reported in Section 3 of this report indicate that hiring remains a problem for many administrators.

Trends. We compared results of the current study with those of our previous special education personnel needs assessment (TCER, 2001). The proportion of *special education administrators* reporting difficulty hiring special education personnel declined considerably from 2001 to 2005. About 88 percent of single districts reported difficulty hiring teachers in 2001; about 39 percent reported difficulty in 2005. About 84 percent of single districts reported difficulty hiring other professionals in 2001; about 71 percent reported difficulty in 2005. These data also suggest that the difficulties were slightly more likely to be in hiring teachers rather than other professionals in 2001. In 2005, special education administrators appeared to be having considerably more difficulty hiring other professionals compared to teachers. (More detailed comparison data are presented in tabular form in Appendix C.)

Barriers to Hiring

We also were interested in identifying some of the factors preventing special education administrators from adequately staffing their programs. Therefore, we asked human resource administrators to select from a list of potential barriers to hiring, the three most critical hiring barriers they had experienced. These data are presented separately for teachers and for other professionals, and reflect the barriers reported by administrators who reported having difficulty hiring personnel. (A complete list of hiring barriers selected as most common is reported in the tables presented in Appendix C.)

Teachers

Overall, *human resource administrators* indicated that the three major barriers to hiring special education teachers were:

- Insufficient candidates with requisite certification or licensure;
- Better salary, benefits, or incentives available in other districts; and
- Salary levels are too low (within the district).

A greater proportion of SSA participant districts (67.1 percent) reported a lack of qualified candidates as one of the three major barriers than did single districts (48.3 percent), or SSAs (44 percent). This may be explained in part by the characteristics of the SSA participant districts. These districts typically are small, and many are in rural locations. Thus there may be fewer job candidates for special education teacher positions (Table 4.2).

Table 4.2. Most Common Barriers to Hiring Special Education Teachers

	Single District Respondents		SSA Participant District Respondents		SSA Respondents	
Barrier to Hiring	Number	Percent	Number	Percent	Number	Percent
Insufficient candidates with required certification or licensure	29	48.3	44	67.1	11	44.0
Better salary/ benefits/ incentives available in other school districts	27	45.0	29	44.6	11	44.0
Salary levels are too low	25	41.7	33	50.8	12	48.0

Source. Human Resource Administrator Survey.

Note. Data is presented for respondents who reported having difficulty hiring special education teachers or other professionals. For single districts, 60 respondents (out of a total of 117) indicated their district was currently having difficulty hiring. For SSA participant districts, 65 respondents (out of a total of 272) indicated their district was currently having difficulty hiring. For SSAs, 25 respondents (out of a total of 40) indicated their district was currently having difficulty hiring.

Both SSA participant districts (50.8 percent) and SSAs (48 percent) identified teacher salary levels that were too low as one of the three major barriers more often than single districts (41.7). While low benefit levels were not a major barrier to hiring special education personnel, SSA participant districts (13.8 percent) and SSAs (12 percent) reported it was a major barrier more often than single districts (3.3 percent). This may reflect greater flexibility single districts have in budgeting for special education teacher positions.

As noted previously, a minority of respondents reported having difficulty hiring teachers. This explains the lower numbers of districts and SSAs experiencing particular barriers. Given the large number of vacancies in a few of the teacher positions reported by *human resource administrators* (see Section 3 of this report), the data presented here may underrepresent the degree to which various aspects of the job and compensation are barriers to hiring special education teachers.

Trends. We compared results from the current study with those reported in our 2001 needs assessment (TCER, 2001) to assess potential trends in hiring. Although the listing of potential barriers was not identical in the two studies, the major barriers to hiring teachers reported by *human resource directors* in 2001 were quite similar to those reported in the current study: (1) an insufficient supply of candidates; (2) better salary, benefits, or incentives in other local education agencies; and (3) offering insufficient stipends (for single districts), or local education agency's geographic location (for SSA participant districts). This same pattern was reported by *special education directors* in 2001 for single districts and SSAs.

Other Professionals

Human resource administrators identified three major barriers to hiring other special education professionals (Table 4.3):

- Insufficient candidates with requisite certification or licensure,
- Salary levels too low (within the district), and
- Better salary, benefits, or incentives available in other school districts, or in private agencies, hospitals, etc.

Table 4.3. Most Common Barriers to Hiring Other Special Education Professionals

Barrier to Hiring	Single District Respondents		SSA Participant District Respondents		SSA Respondents	
	Number	Percent	Number	Percent	Number	Percent
Insufficient candidates with required certification or licensure	35	**58.3**	16	**24.6**	20	**80.0**
Salary levels are too low	30	**50.0**	20	**30.8**	15	**60.0**
Better salary/ benefits/ incentives available in other school districts	27	**45.0**	19	**29.2**	10	40.0
Better salary/ benefits/ incentives available in private agencies, hospitals, etc.	23	38.3	8	12.3	13	**52.0**
Demands of the job (e.g., caseloads, personal safety issues, etc.)	12	20.0	11	16.9	10	40.0

Source. Human Resource Administrator Survey.

Note. Bold type indicates the three highest percentages in each respondent group. Data is presented for respondents who reported having difficulty hiring special education teachers or other professionals. For single districts, 60 respondents (out of a total of 117) indicated their district was currently having difficulty hiring. For SSA participant districts, 65 respondents (out of a total of 272) indicated their district was currently having difficulty hiring. For SSAs, 25 respondents (out of a total of 40) indicated their district was currently having difficulty hiring.

Trends. The major barriers to hiring other special education professionals reported by *human resource directors* in 2001 were very similar to those reported in 2005: (1) an insufficient supply of qualified candidates was selected as a major barrier by 69.3 percent of single districts, and 59.8 percent of SSA participant districts; (2) better compensation in other districts was selected by 65.9 percent of single districts, and 63 percent of SSA participant districts; (3) better compensation in other professional settings was selected by 40.9 percent of single districts, and 29.9 percent of SSA participant districts. *Special education directors* in 2001 selected these same barriers as the three major hiring barriers for other professionals in single districts and in SSAs.

Recruitment of Special Education Personnel

One approach to ensuring an organization has an adequate number of qualified job candidates is to strengthen recruitment efforts. We wanted to identify recruitment strategies that might be expanded to more districts or strengthened to provide applicant pools with a reliable supply of qualified job candidates. In reviewing the human resource management literature on recruitment, we identified a list of 18 strategies that have been used or recommended for the recruitment of educators, particularly those in special education. We asked *human resource administrators* to indicate the degree to which each strategy was used in their district. We also asked them to rate the effectiveness of each strategy they used relative to attracting and hiring qualified special education personnel. Results of our analyses, including the 12 most effective strategies, are presented separately for teachers and other professionals. A complete listing of all recruitment strategies and their use and effectiveness is reported in the tables presented in Appendix C.

Teachers

Use of recruitment strategies. More than half of single districts, SSA participant districts, and SSAs reported using the following strategies in recruiting teachers (Table 4.4):

- Posting positions on the Internet,
- Attending or sponsoring job fairs,
- Contacting in-state colleges and universities, and
- Contacting personnel in other Texas schools and agencies.

While respondents from single districts, SSA participant districts, and SSAs tended to use the same key strategies for recruiting teachers, they differed in the proportions of respondents reporting strategy use.

Table 4.4. Use and Effectiveness of Key Recruitment Strategies for Special Education Teachers

	Single Districts		SSA Participant Districts		SSAs	
Recruitment Strategy	Percent Using	Mean Rating	Percent Using	Mean Rating	Percent Using	Mean Rating
Post positions on the Internet	96.9	3.6	83.1	3.4	97.1	3.2
Attend or sponsor job fairs	92.2	3.3	59.8	2.7	68.7	2.4
Provide supplements, stipends, or signing bonuses for special education positions	59.4	3.0	23.1	2.8	55.9	2.8
Provide attractive benefit packages	61.9	2.9	26.5	2.5	33.3	2.5
Contact in-state colleges and universities	96.2	2.9	68.8	2.7	88.2	2.4
Streamline the hiring process	73.6	2.9	41.4	2.6	53.3	2.1
Offer financial incentives for personnel to become certified or credentialed in special education	41.7	2.8	26.7	2.5	50.0	2.3
Send special education personnel on recruiting trips	60.9	2.7	21.8	2.6	32.2	2.5
Contact personnel in other Texas schools and agencies	83.2	2.7	67.1	2.8	79.4	2.6
Promote business partnerships to support new employees	26.4	2.3	7.6	2.2	8.8	2.5
Contact state credentialing/ licensing agencies and educational associations	61.8	2.3	42.1	2.7	58.1	2.2
Contact out-of-state colleges and universities	48.8	2.3	14.1	2.0	33.3	2.5

Source. Human Resource Administrator Survey.
Note. Percentage represents districts that reported using strategy a small extent, moderate extent, or great extent (i.e., ratings 2, 3, or 4). Use and effectiveness were both rated on 4-point scale: 1=*not at all*, 2= *small extent*, 3= *moderate extent*, 4= *great extent*. Total responses for use items varied (single districts=117 to 130, SSA participant districts=217 to 231, SSAs=31 to 36). Total responses for effectiveness items varied (single districts=28 to 121, SSA participant districts=12 to 172, SSAs=2 to 31).

Single districts. A large majority of single districts relied on several recruitment strategies in staffing teacher positions: posting positions on the Internet (96.9 percent of respondents used this strategy), contacting in-state colleges and universities (96.2 percent), attending or sponsoring job fairs (92.2 percent), and contacting personnel in other Texas schools and agencies (83.2 percent). A large proportion of the single district respondents also relied on streamlining the hiring process (73.6 percent), increasing marketing efforts to attract bilingual personnel (72.4 percent), and increasing marketing efforts to attract minority candidates (70.2 percent). This is a fairly comprehensive combination of strategies designed to obtain a qualified and diverse applicant pool for teacher positions. In addition, these strategies were among those with higher mean effectiveness ratings.

SSA participant districts. SSA participant districts relied primarily on posting positions on the Internet (83.1 percent of respondents used this strategy). A majority also relied on contacting in-state colleges and universities (68.8 percent), contacting personnel in other Texas schools and agencies (67.1 percent) and attending or sponsoring job fairs (59.8 percent). This combination of strategies is an efficient means of reaching both new and experienced job applicants, however, up to one-third of the SSA participant districts may not be using any of these approaches.

SSAs. For SSAs, the largest proportions of respondents indicated they posted positions on the Internet (97.1 percent), contacted in-state colleges and universities (88.2 percent), and contacted personnel in other Texas schools and agencies (79.4 percent). A majority of respondents also targeted retired special education personnel (70.6 percent), and attended or sponsored job fairs (68.7 percent). This combination of strategies addresses recruitment of newly credential applicants, as well as teachers with experience in the field. Internet strategies allow access to a broader applicant pool, and efforts to reach retired educators in special education will be helpful in addressing teaching positions in which there are critical shortages.

As reported in Section 3 of this report, most of the teacher positions in Texas public schools are funded by single districts and SSA participant districts. While many recruitment strategies were used by a majority of single districts in our study, SSA participant districts used fewer strategies. As discussed later in this section, mean effectiveness ratings for the recruitment strategies were lower overall in SSA participant districts than in single districts. It is possible that SSA participant districts rely on their SSA to coordinate special education hiring for the district, in addition to administering the SSA special education programs and services. SSA participant districts that are less involved in the staffing function may be less likely to use a broad range of recruitment strategies, and may be less successful in implementing them.

Most effective recruitment strategies. The mean effectiveness ratings of the various strategies relative to recruiting special education teachers ranged from 1.9 to 3.6 (on the 4-point scale presented to human resource administrators where 1=*not at all effective,* 2=*effective to a small extent,* 3=*effective to a moderate extent,* 4=*effective to a great extent*). Results suggest that some of the strategies were perceived as much more useful than others. Twelve strategies that received a mean rating of 2.5 or greater for single districts, SSA participant districts, or SSAs are presented in Table 4.4 .

Two teacher recruitment strategies seemed to be most effective for all three respondent groups:

- Posting positions on the Internet; and
- Providing supplements, stipends, or signing bonuses.

The effectiveness ratings for these strategies ranged from 2.8 to 3.6. The cost efficiencies as well as the potential to reach a broad range of applicants make the Internet an extremely attractive recruitment strategy for special education teacher positions. Providing financial incentives allows districts and SSAs to lure qualified job applicants who are attracted to better compensation from other nearby districts and non-educational organizations.

For single districts, one additional strategy was at least moderately effective in recruiting teachers (mean rating 3.3):

- Attending or sponsoring job fairs.

For SSA participant districts and SSAs, the only recruitment strategy rated at least moderately effective was posting positions on the Internet. The next most effective strategy for teacher recruitment was providing supplements, stipends, or signing bonuses, with a mean rating of 2.8. One additional strategy received a rating of 2.8 among SSA participant districts, and 2.6 among SSAs:

- Contacting personnel in other Texas schools and agencies.

While this strategy demonstrated a mean rating of 2.7 among single districts, there were eight other recruitment strategies that received the same or higher ratings (see Table 4.4).

Interestingly, several recruitment strategies appeared to be more effective for one of the respondent groups, and less effective for another. For example, attending or sponsoring job fairs was perceived as much more effective by single district respondents (mean rating of 3.3), than by SSA participants (2.7) or SSAs (2.4). One explanation for this is that single districts participating in job fairs may be located in more urban areas where job fairs are an efficient means for novice and experienced personnel to seek employment. Streamlining the hiring process was more effective for single districts (2.9) and SSA participant districts (2.6), than for SSAs (2.1). This suggests the possibility that fewer steps in the hiring process, or a shorter hiring time horizon, are not especially important to job applicants in SSAs, and thus may not serve as a useful means to hire more personnel.

Trends. In comparing results of the current study with our 2001 personnel needs assessment (TCER, 2001), we found the strategies reported as most successful in recruiting teachers in 2001 were quite similar to those reported as successful in 2005. For single districts in 2001, the recruitment strategies selected as successful by a majority of respondents were (1) posting positions on the Internet and (2) contacting colleges and universities. A majority of SSA participant districts in 2001 reported the following strategies as most effective: (1) posting positions on the Internet, (2) contacting colleges and universities, and (3) contacting personnel in other local education agencies.

Least effective recruitment strategies. Some of the recruitment strategies appeared to be effective only to a small extent for one or another of the survey groups. The least effective strategy for single districts was to increase marketing efforts to attract special education personnel not currently working, for example, retired personnel, or personnel caring for home or family (mean rating of 2.1). Based on some of the comments written on the questionnaires we mailed to special education teachers, it appears that a number of teachers are, or plan to be, retired and continuing to work in an area of special education. Thus these retirees are already in the workforce and marketing will do little to increase their potential for joining the applicant pool.

For both SSA participant districts and SSAs, one of the least effective recruitment strategies was to increase marketing efforts to attract bilingual special education personnel (mean rating for SSA participant districts—2.1, for SSAs—1.9). SSA participant districts also rated marketing to nontraditional groups, such as military and other industry retirees, as lower in effectiveness (2.1). SSAs rated as low in effectiveness one additional recruitment strategy: increasing marketing efforts to attract minority candidates (mean rating of 1.9). These less effective strategies were employed by 50 percent or fewer of the districts or SSAs and it is possible that if the strategies were used widely, some of these districts would experience greater utility from their efforts. Or perhaps the strategies require a different combination of activities than those currently being employed to target the desired applicant pool.

It is important to note that the least effective strategies reported in the current study are still effective to a small extent in recruiting special education teachers, and thus can contribute marginally, yet significantly, to overall recruitment efforts.

Other Professionals

Use of recruitment strategies. More than half of single districts, SSA participant districts, and SSAs used the following recruitment strategy for staffing professional positions.

- Posting positions on the Internet.

However, there was great variation in the use of all of the strategies across the three respondent groups (Table 4.5).

Table 4.5. Use and Effectiveness of Key Recruitment Strategies for Other Special Education Professionals

	Single Districts		SSA Participant Districts		SSAs	
Recruitment Strategies	Percent Using	Mean Rating	Percent Using	Mean Rating	Percent Using	Mean Rating
Post positions on the Internet	95.2	3.5	59.6	3.3	91.7	3.1
Attend or sponsor job fairs	81.1	3.2	35.4	2.9	44.1	2.0
Provide supplements, stipends, or signing bonuses for special education positions	54.8	3.2	18.2	2.9	60.0	3.2
Streamline the hiring process	69.8	2.9	31.2	2.6	53.1	1.9
Provide attractive benefit packages	58.2	3.0	19.4	2.7	45.7	2.3
Offer financial incentives for personnel to become certified or credentialed in special education	37.2	2.8	20.0	2.6	47.2	2.4
Send special education personnel on recruiting trips	50.8	2.8	20.9	2.7	27.3	2.2
Contact in-state colleges and universities	84.9	2.8	39.9	2.8	85.7	2.3
Contact personnel in other Texas schools and agencies	79.2	2.6	44.6	2.8	82.7	2.3
Contact out-of-state colleges and universities	38.7	2.6	13.4	2.2	23.5	2.3
Target retired special education personnel	48.8	2.5	26.7	2.6	64.7	2.5
Increase marketing efforts to attract bilingual personnel	59.2	2.4	25.3	2.5	50.0	2.1

Source. Human Resource Administrator Survey.
Note. Percentage represents districts that reported using strategy a small extent, moderate extent, or great extent (i.e., ratings 2, 3, or 4). Use and effectiveness were both rated on a 4-point scale: 1=*not at all*, 2= *small extent*, 3= *moderate extent*, 4= *great extent.* Total responses for use items varied (single districts=116 to 126, SSA participant districts=172 to 178, SSAs=32 to 36). Total responses for effectiveness items varied (single districts=25 to 111, SSA participant districts=12 to 89, SSAs=5 to 30).

Single districts. Single districts appeared to rely most on posting positions on the Internet (95.2 percent), attending or sponsoring job fairs (81.1 percent), contacting in-state colleges and universities (84.9 percent), and contacting personnel in other Texas schools and agencies (79.2 percent). In addition, a majority of the single districts (69.8 percent) streamlined the hiring process to improve recruitment efforts. These strategies taken together provide a means of reaching newly credentialed other special education professionals, as well as experienced other professionals currently working in the field. The Internet postings also provide a means of reaching a broad spectrum of qualified applicants in a very cost efficient manner. Streamlining the hiring process ensures that interested applicants remain engaged throughout the process.

SSA participant districts. While a majority of SSA participant districts (59.6 percent) relied on Internet postings to recruit other professionals, these districts did not have a strong, common recruitment approach. In fact, there were seven strategies used by 20 percent or fewer SSA participant districts. For these districts, a small expansion of their recruitment efforts into areas reported as effective may result in significantly enhanced applicant pools.

SSAs. SSAs appeared to rely most on posting positions on the Internet (91.7 percent of respondents used this strategy), contacting in-state colleges and universities (85.7 percent of respondents), and contacting personnel in other Texas schools and agencies (82.7 percent). They relied to a lesser extent on targeting retired special education personnel (64.7 percent); providing supplements, stipends or signing bonuses (60 percent), and contacting state credentialing and licensing agencies and educational associations (58.8 percent).

As noted later in this section, single and SSA participant districts typically used strategies that had higher mean ratings on the effectiveness scale, while more than 80 percent of the SSA respondents used two strategies that were rated as effective to only a small extent—contacting in-state colleges and universities, and contacting personnel in other Texas schools and agencies (mean rating of 2.3 for both strategies). While these are an effective means of reaching newly credentialed as well as experienced other special education professionals for single and SSA participant districts, they do not appear to attract job candidates as successfully for SSA positions. It is possible that these two strategies may be more useful if they are implemented differently in the future.

Most effective recruitment strategies. The mean effectiveness ratings of strategies for recruiting other special education professionals ranged from 1.7 to 3.6 on the 4-point scale. The twelve most effective strategies are presented in Table 4.5.

Two strategies were most effective in recruiting other special education professionals for all three respondent groups:

- Posting positions on the Internet; and
- Providing supplements, stipends, or signing bonuses.

The effectiveness ratings for these strategies ranged from 2.9 to 3.5. These same strategies were the most effective for teacher recruiting across all three respondent groups also. They tend to be efficient ways of attracting large numbers of job applicants for many different kinds of positions. Providing supplements or other financial incentives may be particularly useful when it can be used to make compensation packages for other special education professionals more competitive with those being offered by nearby districts.

For single districts, two additional strategies were rated at least moderately effective in recruiting other professionals:

- Attending or sponsoring job fairs, and
- Providing attractive benefit packages.

These had mean ratings of 3.2 and 3.0, respectively.

For SSA participant districts, the only strategy with a mean rating of 3.0 or greater was posting positions on the Internet. Providing supplements, stipends, or signing bonuses was rated as 2.9, along with:

- Attending or sponsoring job fairs.

For SSAs, there were no strategies rated as moderately effective other than the two noted previously for all respondents.

A second set of recruitment strategies appears to be somewhat effective for single and SSA participant districts, but less effective for SSAs. These strategies include:

- Streamlining the hiring process,
- Offering financial incentives for personnel to become certified or credentialed in special education,
- Sending special education personnel on recruiting trips,
- Contacting in-state colleges and universities, and
- Contacting personnel in other Texas schools and agencies.

For single districts and SSA participant districts, mean effectiveness ratings ranged from 2.6 to 2.9 for each of these strategies. Single districts appeared to use some strategies more than others regardless of effectiveness. For example, offering financial incentives for personnel to obtain more training was rated as moderately effective overall by single districts (2.8), yet was used only by 37.2 percent of the respondents. Contacting in-state colleges and universities was also rated as moderately effective (2.8), and was used by 84.9 percent of single district respondents.

In contrast, even the most effective strategy for SSA participant districts—posting positions on the Internet (mean rating 3.3)—was not used by more than two-thirds of the respondents (59.6 percent). Districts that expand their repertoire of recruitment strategies can expect to develop stronger applicant pools with qualified job candidates.

Another strategy—targeting retired special education personnel, appeared to be small to moderately effective in recruiting other special education professionals for all three survey groups (mean rating for single districts—2.5, for SSA participants—2.6, for SSAs—2.5).

Three recruitment strategies for other professionals seemed to be more effective for one respondent group, and less effective for another. Specifically, attending or sponsoring job fairs was moderately effective for single districts (mean rating 3.2) and SSA participant districts (2.9), but only somewhat effective for SSAs (2.0). Similarly, streamlining the hiring process was much more effective for single districts (2.9) and SSA participant districts (2.6) than for SSAs (1.9). In general, effectiveness ratings were considerably lower for the recruitment strategies in SSAs, ranging from 1.9 to 3.1. By comparison, ratings ranged from 2.2 to 3.5 for single districts, and from 2.2 to 3.6 for SSA participant districts.

SSAs typically serve several school districts within a region, which may be geographically diverse or expansive, and personnel may be assigned to work at multiple sites within the SSA region. It is possible that the kinds of job applicants targeted by some of the recruitment strategies are not as likely to be interested in working within an SSA. For example, job applicants who are early in their career may be more likely to attend a job fair, but less likely to accept a position in a rural area. Streamlining the hiring process may be useful for districts where there is significant competition for special education personnel from a variety of employers. Having a shorter timeline or other efficiencies in hiring may not be critical to applicants who live in SSA regions and are willing to wait for jobs in the SSA.

Trends. Results of the current study are quite similar to those reported in our earlier study (TCER, 2001). For single districts in 2001, the following strategies were selected as most effective by a majority of respondents: (1) posting positions on the Internet, and (2) contacting colleges and universities. A majority of SSA participant districts reported these recruitment strategies effective for professional positions: (1) posting positions on the Internet, (2) contacting colleges and universities, and (3) contacting personnel in other local education agencies.

Least effective recruitment strategies. All of the strategies presented were somewhat effective in recruiting other professionals in single districts and SSA participant districts. For SSAs, three strategies were rated lower—advertising in national educational publications (mean rating of 1.7), promoting business partnerships to support new employees (1.8), and streamlining the hiring process (1.9). It is possible that job candidates interested in working for an SSA are already living and working within the region served by the SSA, and therefore these strategies are not critical to their decision making.

Staffing Strategies for Personnel Shortages

School districts potentially can use a variety of staffing strategies to reduce existing or avoid potential staffing shortages among special education personnel. In the current study, *special education administrators* were asked to rate the degree to which their district utilized 14 different staffing strategies. The results are presented below for teachers and for other professionals.

Teachers

The strategy most likely to be used to address special education teacher staffing shortages was hiring more paraprofessionals (Table 4.6). In fact, 90.4 percent of single districts and 91.8 percent of SSAs reported using this approach. This is consistent with the staffing and vacancy data reported in Section 3 of this report. We estimated that there were about 26,000 paraprofessional positions statewide at the time of the survey. While the vacancy rate was relatively low (3.2 percent), the number of vacant positions (about 800) exceeded the number of vacancies for any of the other special education teacher and professional positions. The number of vacant paraprofessional positions, combined with the degree to which districts and SSAs use these positions to compensate for shortages in other areas, indicates that paraprofessionals are critical to special education staffing.

Table 4.6. Staffing Strategies Used to Address Special Education Teacher Shortages

Staffing Strategy	Single Districts - % Using Strategy	SSAs - % Using Strategy
Hire more special education paraprofessionals	90.4	91.8
Increase class size or case load	66.9	81.0
Blend funding to create inclusive settings	66.7	78.3
Hire retired special educators	66.1	74.2
Use interns from alternative certification programs	65.4	69.4
Use long-term certified substitutes	63.7	61.3
Hire personnel on temporary certificates	63.7	74.2
Consolidate instructional arrangements	53.9	61.3
Contract for fully certified personnel	54.0	67.7
Allow job sharing	40.4	38.3
Share service arrangements with other districts	34.4	69.8
Send students to districts where services are available	32.8	56.5
Use staff from ESCs	30.9	47.5
Use long-term uncertified substitutes	29.8	27.4

Source. Special Education Administrator Survey.
Note. Percentage represents districts that used the strategy to a small, moderate, or great extent (extent of use ratings 2, 3, or 4). Items were rated on a 4-point scale: 1=*used not at all*, 2= *used to a small extent*, 3= *used to a moderate extent*, 4= *used to a great extent*. Total responses for strategy questionnaire items varied from 174 to 181 for single districts, 59 to 63 for SSAs.

Several other strategies were used by single districts and SSAs, however, it appears that more SSAs relied more on many of the staffing strategies than did single districts. For example, 81 percent of SSAs relied on increasing class size or case loads to address teacher staffing shortages, whereas only 66.9 percent of single districts relied on this strategy. Staffing strategies are summarized below for single districts and SSAs.

In addition to hiring paraprofessionals, about two-thirds of single district respondents used six additional staffing strategies:

- Increase class size or case load,
- Blend funding to create inclusive settings,
- Hire retired special educators,
- Use interns from alternative certification programs,
- Use long-term certified substitutes,
- Hire personnel on temporary certificates.

Seven additional staffing strategies used by two-thirds or more of the SSAs:

- Increase class size or case load,
- Blend funding to create inclusive settings,
- Hire retired special educators,
- Hire personnel on temporary certificates,
- Share service arrangements with other districts,

- Use interns from alternative certification programs, and
- Contract for fully certified personnel.

Other Professionals

For shortages in professional positions, most of the single districts (89 percent) and SSAs (95.4 percent) relied on contracting for fully certified personnel (Table 4.7). There were only three strategies used by more than half of the single districts:

- Contract for fully certified personnel,
- Increase class size or case load, and
- Hire retired special educators.

Table 4.7. Staffing Strategies Used to Address Other Special Education Professional Shortages

Staffing Strategy	Single Districts - % Using Strategy	SSAs – % Using Strategy
Contract for fully certified personnel	89.0	95.4
Increase class size or case load	68.6	79.4
Hire retired special educators	66.1	71.9
Use interns from alternative certification programs	40.4	38.1
Allow job sharing	39.2	50.8
Blend funding to create inclusive settings	38.4	39.7
Hire more special ed. paraprofessionals	36.1	53.3
Use staff from ESCs	35.7	54.7
Hire personnel on temporary certificates	31.9	46.0
Share service arrangements with other districts	28.6	79.7
Use long-term certified substitutes	26.7	25.4
Consolidate instructional arrangements	25.0	30.6
Send students to districts where services are available	19.0	30.2
Use long-term uncertified substitutes	8.5	12.7

Source. Special Education Administrator Survey.
Note. Percentage represents districts that used the strategy to a small, moderate, or great extent (extent of use ratings 2, 3, or 4). Items were rated on a 4-point scale: *1= used not at all,* 2= *used to a small extent,* 3= *used to a moderate extent,* 4= *used to a great extent.* Total respondents each questionnaire item varied from 163 to 173 for single districts, and from 61 to 64 for SSAs.

A majority of SSAs used four additional strategies as well:

- Share service arrangements with other districts,
- Use staff from education service centers (ESCs),
- Hire more paraprofessionals, and
- Allow job sharing.

Summary and Conclusions

Hiring Difficulties

In terms of challenges, some special education administrators reported having difficulty hiring teachers, however, it was much more common for them to report difficulty hiring other professionals. We anticipated administrators would perceive difficulties in staffing professional positions due to the relatively high vacancy rates for some of the bilingual and other professional positions. Given the perceived demand for qualified special education teachers due to NCLB legislation, as well as increased accountability at state and local levels, we were surprised that less than half of the respondents reported having difficulty hiring teachers. It is possible that special education administrators perceived difficulties filling professional positions as relatively more severe than those experienced in staffing teacher positions.

Barriers to Hiring

Major barriers to hiring both teachers and other professionals in the current study were: insufficient candidates with the requisite certification or license; better salary, benefits, or incentives available in other school districts or, in the case of other professionals, in private agencies, hospitals, and other organizations; and salaries that are too low.

One approach to eliminating or reducing these barriers is to implement a broader range of recruitment strategies for hiring special education personnel. Another approach might be to increase the use of stipends or supplements to attract special education personnel. This may be critical for SSAs experiencing additional competition for qualified special education personnel from non-educational organizations. SSAs typically serve a wider geographic area than a school district, and thus there may be a variety of private agencies and hospitals seeking personnel from the same applicant pools as the districts. This approach may also be useful for school districts in close proximity to larger or better funded districts that are in competition for the same teacher applicant pools. A third approach to eliminating or reducing barriers to hiring personnel, particularly for professional positions, is to decrease the demands of the job. This is perceived as a barrier to hiring other professionals by both districts and SSAs and merits dedicated, creative attention.

Recruitment Strategies for Teacher Positions

The majority of single districts, SSA participant districts, and SSAs appeared to rely on three recruitment strategies for teacher positions: posting positions on the Internet, contacting in-state colleges and universities, and contacting personnel in other Texas schools and agencies. Single districts also used streamlining the hiring process, and attending or sponsoring job fairs to recruit teachers.

The strategies reported as most effective in recruiting qualified special education teachers were: posting positions on the Internet; providing supplements, stipends, or signing bonuses; sending special education personnel on recruiting trips; contacting personnel in other Texas schools and agencies.

Single districts were likely to use many effective recruitment strategies for teachers. They may still achieve gains in recruiting for teacher positions in critical shortage areas by expanding strategies that were rated as relatively more effective. Strategies that might be expanded include: offering financial incentives for personnel to become certified or credentialed; providing supplements, stipends, or signing bonuses; providing attractive benefit packages; and sending special education personnel on recruiting trips.

SSA participant districts tended to use fewer recruitment strategies and be less involved than they might have been in staffing special education teacher positions. SSA participant districts may improve their capacity to hire qualified special education teachers and other professionals by utilizing a greater number of successful recruitment strategies. Two recruitment strategies had relatively high mean effectiveness ratings, but were not used by a large proportion of respondents—contacting state credentialing and licensing agencies and educational associations, and providing supplements, stipends, or signing bonuses for special education positions. Adding one of these strategies to existing recruitment efforts may increase the quality and quantity of job applicants for teacher positions, especially in areas where there are critical shortages.

SSAs tended to use a range of recruitment strategies, however, the effectiveness of some of the strategies was lower than that reported for single districts. For critical shortage areas among teacher positions, SSAs may be able to strengthen applicant pools by providing supplements, stipends, or signing bonuses for special education personnel.

Recruitment Strategies for Other Professional Positions

For professional positions, the majority of single districts and SSAs relied on the same three recruitment strategies used for teacher positions: posting positions on the Internet, contacting in-state colleges and universities, and contacting personnel in other Texas schools and agencies. Single districts also relied on streamlining the hiring process to recruit other professionals.

The strategies reported as most effective in recruiting qualified other special education professionals were: posting positions on the Internet; and providing supplements, stipends, or signing bonuses; attending or sponsoring job fairs; and providing attractive benefit packages.

Several other strategies appeared to have potential to successfully recruit other professionals: streamlining the hiring process, offering financial incentives for personnel to become certified or credentialed in special education, sending special education personnel on recruiting trips, and contacting in-state colleges and universities. Typically, recruitment strategies appeared to be more useful for single districts and SSA participant districts, and somewhat less useful for SSAs in attracting and hiring other special education professionals.

Single districts used many different strategies for recruiting other special education professionals, however, some of the more effective strategies were less likely to be used. For example, offering financial incentives for personnel to obtain more training was perceived as more effective than a number of other strategies, yet was used by approximately one-third of the respondents. While a majority of SSA participant districts relied on Internet postings to recruit other professionals, these districts did not have a strong, common recruitment approach. In fact, there were several strategies used by 20 percent or less of the SSA participant districts. For these districts, a small expansion of their recruitment efforts into areas reported as effective may result in significantly enhanced applicant pools. Those districts not listing positions on the Internet might begin with this very cost efficient enhancement to their recruitment program. Other strategies that were rated as effective but not used by a large proportion of SSA participant districts included: contacting in-state colleges and universities; contacting personnel in other Texas schools and agencies; providing supplements, stipends, or signing bonuses; providing attractive benefit packages; attending or sponsoring job fairs; and sending special education personnel on recruiting trips.

In summary, a combination of the most effective recruitment strategies is recommended for districts and SSAs seeking to increase their ability to attract more qualified job applicants for special education positions. SSA participant districts may improve their capacity to hire qualified special education personnel by adding more effective strategies to their routine recruitment efforts.

Staffing Strategies

Special education administrators rely heavily on paraprofessionals in staffing teacher positions. The number of vacant paraprofessional positions, combined with the degree to which districts and SSAs use these positions to compensate for shortages in teacher positions, indicates that paraprofessionals are critical to special education staffing. Future research should investigate the manner in which paraprofessionals support special education teachers.

In addition to hiring paraprofessionals, two-thirds or more of single districts and SSAs used the following staffing strategies for teacher shortages: increase class size or case load, blend funding to create inclusive settings, hire retired special educators, use interns from alternative certification programs, and hire personnel on temporary certificates. Single districts also relied on long-term certified substitutes, while SSAs contracted for fully certified personnel, and engaged in shared service arrangements to staff teacher positions.

A majority of single districts and SSAs used the following staffing strategies for shortages in other special education professional positions: contracting for fully certified personnel, increase class size or case load, and hire retired special educators. Most of the single districts and SSAs relied on contracting for fully certified personnel. While this approach may be an effective means of addressing personnel shortages, it is possible that more cost-efficient approaches can be devised. Some examples include job sharing, and hiring other special education professionals to support ARD committee processes.

For both single districts and SSAs, a more diversified set of staffing strategies was used for teacher positions than for other professional positions. Given the earlier finding that administrators perceived greater challenges in staffing other professional positions, use of a wider range of staffing strategies may be especially important.

5. Retaining Special Education Teachers and Other Special Education Professionals

In order to assess the various work conditions that may serve as potential barriers to retaining special education personnel, we surveyed both human resource administrators and special education administrators. We also surveyed special education administrators regarding retention strategies and their use in single districts and in SSAs. As noted in Section 2, respondents to the Human Resource Administrator Survey included 140 single district administrators (40.7 percent response rate), 288 SSA participant district administrators (41.4 percent), and 42 SSA administrators (32.1 percent). Respondents to the Special Education Administrator Survey included 184 single district administrators (53.5 percent), and 68 SSA administrators (51.9 percent). Our analyses of respondents and non-respondents indicated that respondent districts appear to be very similar to the districts surveyed as a whole. Thus we believe the results of the current study may be generalized to public schools in Texas.

This section summarizes barriers to retaining special education personnel and common retention strategies. We also identify some recent trends in the use of retention strategies since 2001.

Difficulty Retaining Personnel

We obtained administrators' overall perceptions of the challenge of retaining special education personnel by asking human resource administrators and special education administrators whether or not their districts were having difficulty retaining special education personnel. For *human resource administrators*, about one-fourth of the single district respondents (27.2 percent), and about one-third of the SSA respondents (30.6 percent) reported difficulty retaining teachers. About one-third of single districts (37.5 percent), and about one-half of SSA respondents (53.8 percent) reported difficulty retaining professionals. For human resource administrators representing SSA participant districts, 14.9 percent reported difficulty retaining teachers, and 8.7 percent reported difficulty retaining professionals.

The pattern of responses for *special education administrators* was quite similar. These data suggest that districts and SSAs were more likely to experience difficulty retaining other special education professionals than teachers. In addition, SSA participant districts were less likely than single districts or SSAs to experience any difficulties retaining special education personnel. (A table summarizing administrator responses regarding hiring difficulty is presented in Appendix D.)

Barriers to Employee Retention

We were also interested in investigating some of the factors affecting the retention of special education personnel. We asked special education administrators and human resource administrators to indicate the extent to which a variety of work conditions were barriers to personnel retention in their district or SSA. We separated the work conditions into two groups—work conditions that described various aspects of the job, and work conditions related to compensation and career advancement. We asked special education administrators to respond to those items describing the work itself. We asked human resource administrators to respond to items describing the compensation and career structures because these items typically derive from district policies that human resource administrators design and implement. Results of our analyses are presented separately for teachers and professionals. (A complete listing of potential barriers and administrator responses is presented in the tables in Appendix D.)

Teachers

Job-related work conditions. We asked *special education administrators* to indicate the degree to which each of 26 job-related work conditions were barriers to retaining special education teachers. There were several major barriers that emerged from our analysis (Table 5.1). The following four work conditions were considered a barrier to retention by three-fourths or more of both single district and SSA respondents:

- Overwhelming amount of required paperwork,
- Job stress due to conflicting demands of the job and work overload,
- Legal complexities of working in special education, and
- Insufficient prior experience working with particular disabilities.

Three-fourths of the SSA respondents, and a majority of single district respondents, also considered the following three work conditions as a barrier to retention for teachers:

- Excessive case loads or class size,
- Inadequate training in core content subject areas, and
- Dissatisfaction with the assignment.

Table 5.1. Job-Related Work Conditions as Potential Barriers to Retaining Special Education Teachers

	Single Districts Indicating a Barrier		SSAs Indicating a Barrier	
Work Condition	Number	Percent	Number	Percent
Overwhelming amount of required paperwork	147	83.5	58	96.7
Job stress due to conflicting demands of the job and work overload	134	77.0	55	93.2
Legal complexities of working in special education	135	76.7	55	91.7
Insufficient prior experience working with particular disabilities	131	74.9	48	81.4
Inadequate training in core content subject areas	122	69.7	46	76.7
Dissatisfaction with the assignment	121	69.5	45	75.0
Inadequate support from parents of special education students	119	65.4	38	62.3
Inadequate support from general education coworkers	117	64.6	45	72.6
Insufficient time for non-teaching responsibilities	113	62.4	40	65.6
Excessive case loads/class size	109	61.9	47	78.3
Feelings of professional isolation of special education personnel	109	57.1	44	73.3
Inadequate pre-service training of new personnel	97	55.1	39	65.0
Attractiveness of administrative positions relative to special education assignments	97	55.1	39	65.0

Source. Special Education Administrator Survey.
Note. Percentage represents districts that reported work condition as a barrier to a small extent, moderate extent, or great extent (i.e., ratings 2, 3, or 4). Ratings were on a 4-point scale: 1=*not at all a barrier*, 2=*barrier to a small extent*, 3=*barrier to a moderate extent*, 4=*barrier to a great extent*. For single districts, total responses for each questionnaire item varied from 174 to 182; for SSAs, total responses ranged from 59 to 62.

In general, a greater proportion of SSA relative to single district respondents indicated these work conditions were barriers to retention. For example, the amount of paperwork was reported as a barrier by 96.7 percent of SSAs and 83.5 percent of single districts; job stress was reported as a barrier by 93.2 percent of SSAs and 77 percent of single districts. While there are many fewer teacher positions funded by SSAs (499) than single districts (8,631), it is possible that some barriers to retention are more common for SSAs because personnel in these organizations are likely to have multiple campus assignments, great diversity in student disabilities, and large class sizes.

A majority of respondents (62.3 to 72.6 percent) also identified the following three work conditions as barriers to retaining teachers:

- Inadequate support from parents of special education students,
- Inadequate support from general education coworkers, and
- Insufficient time for non-teaching responsibilities.

In SSAs, two-thirds to three-fourths of respondents reported the following work conditions as barriers to retention:

- Feelings of professional isolation of special education personnel,
- Attractiveness or administrative positions relative to special education assignments,
- Inadequate pre-service training of new personnel,
- Inadequate in-service training for new personnel,
- Poor fit of personnel with special education work team, and
- Lack of commitment to special education profession.

Compensation-related work conditions. We asked *human resource administrators* to indicate the extent to which an additional 14 compensation-related work conditions were barriers to retaining teachers. We identified three major barriers to retention for a large majority of single districts, SSA participant districts, and SSAs (Table 5.2). These included:

- Lower salary and/or benefits relative to that available in other local education agencies,
- Lower salary and/or benefits relative to fields outside education, and
- Inadequate stipends or supplements for special education assignments.

Interestingly, in a space provided for special education administrator respondents to write barriers to retention not presented in their questionnaire, 15 respondents indicated that low pay was an important barrier to retention for both special education teachers and other special education professionals.

Lower compensation relative to other local education agencies was considered a barrier by 82 percent of single districts, 71.2 percent of SSA participant districts, and 76.5 percent of SSAs. Lower compensation relative to fields outside education was a barrier for 80.3 percent of single districts, 68.1 percent of SSA participant districts, and 77.4 percent of SSAs. Inadequate stipends or supplements were a barrier for 74.2 percent of single districts, 65.1 percent of SSA participant districts, and 75.8 percent of SSAs.

Due to the rural locations of many SSAs and the extensive regions served by some SSAs, an additional work condition was reported as a barrier by 65.6 percent of SSA participant districts and 87.1 percent of SSAs:

- Geographic location of the district.

For SSAs, two-thirds to three-fourths of respondents also considered three other work conditions to be retention barriers for teachers:

- Commute time to work,
- Insufficient financial incentives for additional non-teaching responsibilities, and
- Inadequate financial support for professional development activities, college coursework, etc.

Table 5.2. Compensation-Related Work Conditions as Potential Barriers to Retaining Special Education Teachers

	Single Districts Indicating a Barrier		SSA Participant Districts Indicating a Barrier		SSAs Indicating a Barrier	
Work Condition	Number	Percent	Number	Percent	Number	Percent
Lower salary/ benefits relative to that available in other LEAs	111	82.0	183	71.2	26	76.5
Lower salary/ benefits relative to fields outside education	106	80.3	169	68.1	24	77.4
Inadequate stipends/ supplements for special education assignments	98	74.2	162	65.1	25	75.8
Insufficient financial incentives for additional non-teaching responsibilities	68	52.7	113	46.9	22	68.7
Inadequate financial support for professional development activities, college coursework, etc.	68	51.5	104	43.0	20	66.7
Geographic location of the district (e.g., rural, etc.)	69	52.7	184	65.6	27	87.1
Commute time to work (e.g., too long, etc.)	54	41.2	114	47.5	22	73.3

Source. Human Resource Administrator Survey.
Note. Percentage represents districts that reported work condition as a barrier to a small extent, moderate extent, or great extent (i.e., ratings 2, 3, or 4). Ratings were on a 4-point scale: 1=*not at all a barrier,* 2=*barrier to a small extent,* 3=*barrier to a moderate extent,* 4=*barrier to a great extent*. For single districts, total responses for each questionnaire item varied from 128 to 133; for SSA participant districts, responses for each item ranged from 240 to 257; for SSAs, responses for each item ranged from 28 to 43.

Trends. We compared results from the current study with information reported in our 2001 needs assessment relative to employee retention. In 2001, *special education administrators* were asked to identify the top five barriers to retention from a list of 19 job-related and compensation-related work conditions. The five most common barriers to retention for teachers, as reported by single district respondents were: (1) burnout or job stress, (2) better salary, benefits, or incentives in other local education agencies, (3) amount of paperwork, (4) desire to move to educator position outside special education, and (5) job's legal complexities. For the SSAs, the five most common retention barriers included the first four work conditions which were the most common for single districts; the fifth was geographic location of the local education agency.

In the 2001 needs assessment, *human resource administrators* were asked to select the top three barriers to retention from a list of seven primarily compensation-related work conditions. The three most common barriers reported by both single district and SSA respondents were: (1) better salary, benefits, or

incentives in other local education agencies; (2) better salary, benefits, or incentives in other professional settings; and (3) geographic location of local education agency.

While the questions pertaining to retention were structured differently for respondents to the 2005 surveys, the most common barriers in 2001 were among the major barriers identified in the 2005 study. The data indicate that the retention difficulties identified in 2001 continue to persist in 2005.

Other Professionals

Job-related work conditions. We asked *special education administrators* to evaluate 26 job-related work conditions as potential barriers to retaining other special education professionals. These work conditions were the same as those used to assess special education teacher retention barriers. Three major barriers were identified in our analysis (Table 5.3). These were considered a barrier to retention by three-fourths or more of both single district and SSA respondents:

- Overwhelming amount of required paperwork,
- Legal complexities of working in special education, and
- Job stress due to conflicting demands of the job and work overload.

Overwhelming paperwork was considered a barrier by 81.8 percent of single districts and 92.2 percent of SSAs. Legal complexities were considered a barrier by 79.4 percent of single districts and 86.2 percent of SSAs. Job stress was considered a barrier by 76.5 percent of single districts and 84.4 percent of SSAs. Two-thirds to three-fourths of respondents also reported the following work conditions as barriers to retention:

- Excessive case loads or class size, and
- Multiple-campus assignments.

Three additional work conditions were perceived as barriers by two-thirds to three-fourths of SSAs:

- Attractiveness of administrative positions relative to special education assignments,
- Feelings of professional isolation by personnel, and
- Inadequate support from general education coworkers.

As was true for teachers, the key barriers to retaining other professionals focused on the work itself and how that work was structured.

Table 5.3. Job-Related Work Conditions as Potential Barriers to Retaining Other Special Education Professionals

Work Condition	Single Districts Indicating a Barrier		SSAs Indicating a Barrier	
	Number	Percent	Number	Percent
Overwhelming amount of required paperwork	139	81.8	59	92.2
Legal complexities of working in special education	135	79.4	56	86.2
Job stress due to conflicting demands of the job and work overload	127	76.5	54	84.4
Multiple-campus assignments for special education personnel	104	62.7	44	68.7
Excessive case loads/class size	105	61.8	49	76.6
Attractiveness of administrative positions relative to special education assignments	89	52.4	46	73.0
Feelings of professional isolation of special education personnel	84	49.1	42	64.6
Inadequate support from general education coworkers	90	52.0	41	62.1

Source. Special Education Administrator Survey.
Note. Percentage represents districts that reported work condition as a barrier to a small extent, moderate extent, or great extent (i.e., ratings 2, 3, or 4). Ratings were on a 4-point scale: 1=*not at all a barrier*, 2= *barrier to a small extent*, 3=*barrier to a moderate extent*, 4=*barrier to a great extent*. For single districts total responses for each questionnaire item varied from 166 to 173; for SSAs, total responses varied from 59 to 62.

Compensation-related work conditions. We asked *human resource administrators* to indicate the extent to which the additional 14 compensation-related work conditions were barriers to retaining other professionals. We identified three major barriers to retention for a large proportion of single districts and SSAs, and for many SSA participant districts as well (Table 5.4). These included:

- Lower salary and/or benefits relative to fields outside education,
- Lower salary and/or benefits relative to that available in other local education agencies, and
- Inadequate stipends or supplements for special education assignments.

Lower compensation relative to fields outside education was a barrier to retention for 88.3 percent of single districts, 62.3 percent of SSA participant districts, and 82.9 percent of SSAs; lower compensation relative to other local education agencies was a barrier for 82.8 percent of single districts, 67.7 percent of SSA participant districts, and 83.3 percent of SSAs; inadequate stipends or supplements was a barrier for 73.2 percent of single districts, 57.1 percent of SSA participant districts, and 75 percent of SSAs.

A majority of SSA participant districts (61 percent) and SSAs (91.2 percent) perceived the following work conditions to be a retention barrier for other professionals:

- Geographic location of the district.

Three work conditions were retention barriers for other professionals in a majority of SSAs (62.5 to 78.1 percent) but not districts:

- Long commute time to work,
- Insufficient financial incentives for additional non-teaching responsibilities, and
- Inadequate financial support for professional development and related activities.

The major barriers to retention of other professionals were the same as those characterizing retention of teachers. They relate primarily to pay and to the geographic location of the job.

Table 5.4. Compensation-Related Work Conditions as Potential Barriers to Retaining Other Special Education Professionals

Work Condition	Single Districts Indicating a Barrier		SSA Participants Indicating a Barrier		SSAs Indicating a Barrier	
	Number	Percent	Number	Percent	Number	Percent
Lower salary/ benefits relative to fields outside education	113	88.3	99	62.3	29	82.9
Lower salary/ benefits relative to that available in other LEAs	106	82.8	111	67.7	30	83.3
Inadequate stipends/ supplements for special education assignments	93	73.2	89	57.1	27	75.0
Geographic location of the district (e.g., rural, etc.)	62	50.0	97	61.0	31	91.2
Commute time to work (e.g., too long, etc.)	54	43.5	70	45.2	25	78.1
Inadequate financial support for professional development activities, college coursework, etc.	61	49.2	61	39.1	20	62.5
Insufficient financial incentives for additional non-teaching responsibilities	54	44.6	56	36.4	22	64.7

Source. Human Resource Administrator Survey.

Note. Percentage represents districts that reported work condition as a barrier to a small extent, moderate extent, or great extent (i.e., ratings 2, 3, or 4). Ratings were on a 4-point scale: 1=*not at all a barrier*, 2=*barrier to a small extent*, 3=*barrier to a moderate extent*, 4=*barrier to a great extent*. For single districts, total responses for each questionnaire item varied from 122 to 128; for SSA participant districts, responses varied from 154 to 164; for SSAs, responses varied from 30 to 36.

Trends. We compared results from the current study with information reported in our 2001 needs assessment for special education professional positions. In 2001, the five most common barriers to retention for other professionals, as reported by both single district and SSA *special education administrators* were: (1) better salary, benefits, incentives in other local education agencies; (2) burnout or job stress; (3) amount of paperwork; (4) better salary, benefits, or incentives in other professional settings; and (5) job's legal complexities.

The three most common retention barriers for other professionals reported by *human resource administrators* in 2001 were: (1) better salary, benefits, or incentives in other local education agencies; (2) better salary, benefits, or incentives in other professional settings; and (3) geographic location of local education agency.

In the 2005 study, these same work conditions were reported as being barriers to a greater extent than other work conditions presented. It also appears that both teachers and other professionals shared the same barriers to retention in 2001 and in 2005. Persistent barriers to retaining special education personnel may require different solutions than those currently in place.

Retention Strategies for Special Education Personnel

In order to ascertain which strategies might be best to implement or expand toward the goal of increasing the retention of special education personnel, we asked *special education administrators* to indicate the effectiveness of various strategies in retaining special education personnel. We also obtained information regarding the extent to which districts and SSAs used each strategy. Administrators responded to a listing of 20 strategies we compiled from the literature as well as from recommendations derived from our previous special education personnel needs assessment (TCER, 2001). Questionnaire items developed to investigate retention strategies were aimed at special education personnel generally; therefore, our results are presented for teachers and other professionals combined.

Most Effective Retention Strategies

Almost all of the strategies were effective to some extent (Table 5.5). No strategies were rated as effective to a great extent. Single districts and SSAs shared the same set of most effective strategies, although the highest mean ratings for single districts were a few points above the mean ratings for SSAs.

There were eight strategies rated as more than moderately effective for retaining special education personnel in single districts, including providing:

- Adequate access to instructional resources and teaching materials,
- Release time for professional development,
- Financial support for professional development,
- Adequate classroom space and equipment,
- Adequate access to reliable computer technology to assist with paper work responsibilities,
- Adequate support from paraprofessionals,
- Support relative to legal issues, and
- Clerical support to assist with paperwork responsibilities.

The effectiveness ratings for these strategies ranged from 3.1 to 3.3.

For SSAs, there were four strategies rated as more than moderately effective for retention, including providing:

- Access to reliable computer technology to assist with paper work responsibilities,
- Adequate access to instructional resources and teaching materials,
- Financial support for professional development, and
- Release time for professional development.

Four additional strategies were rated highly among SSA respondents (effectiveness ratings ranging from 2.8 to 3.0), including providing:

- Adequate support from paraprofessionals,
- Support relative to legal issues,
- Adequate classroom space and equipment, and
- Clerical support to assist with paperwork responsibilities.

Table 5.5. Retention Strategies for Special Education Personnel

Retention Strategies	Single Districts		SSAs	
	Percent Using	Mean Rating	Percent Using	Mean Rating
Adequate access to instructional resources and teaching materials	97.1	3.3	96.8	3.1
Release time for professional development	90.8	3.2	93.7	3.1
Financial support for professional development	85.0	3.2	89.1	3.1
Adequate classroom space and equipment	96.5	3.1	98.4	2.8
Access to reliable computer technology to assist with paperwork	95.4	3.1	93.7	3.2
Adequate support from paraprofessionals	97.7	3.1	98.4	3.0
Support regarding legal issues	95.9	3.1	96.9	2.9
Clerical support to assist with paperwork	72.6	3.1	90.5	2.8
Opportunities for special education personnel in district to discuss common issues	93.6	3.0	93.7	2.7
Mentoring programs for new special education personnel	85.6	2.9	95.1	2.7
Informative (rather than evaluative) feedback regarding teaching	90.7	2.8	91.5	2.6
Collaborative planning time for special education within regular schedule	79.2	2.8	85.2	2.6
Financial incentives to compensate for additional non-teaching responsibilities	52.1	2.7	50.8	2.5
Release time, or reduced case loads/ class sizes, for additional non-teaching responsibilities	52.8	2.7	51.7	2.7
Financial incentives for completing additional state certification tests, college courses, advanced degrees, and/or professional development activities	47.6	2.6	47.5	2.6
Funds for merit pay for special educators	2.9	2.6	8.3	2.0
Peer coaching for experienced special education personnel	48.3	2.6	48.3	2.3
Extra planning time for special education within regular schedule	45.9	2.6	61.9	2.6
Career path opportunities for leadership positions	63.6	2.5	49.2	2.5
Fund bonuses for all faculty and staff in schools that meet certain performance criteria	9.3	2.1	8.5	2.5

Source. Special Education Administrator Survey.

Note. Percentage represents districts that reported work condition as a barrier to a small extent, moderate extent, or great extent (i.e., ratings 2, 3, or 4). Use and effectiveness were each rated on a 4-point scale: 1=*not at all,* 2=*small extent,* 3=*moderate extent,* 4=*great extent*. For single districts, total responses for each questionnaire item varied from 163 to 176; for SSAs, total responses ranged from 59 to 64.

Trends. To assess changes in retention strategies over time, we compared results of the current study with those of the 2001 personnel needs assessment (TCER, 2001). In 2001, *human resource administrators* were asked to select, from a list of 10 incentives, up to three of the most successful incentives used to improve retention. For teachers, the top three retention incentives or strategies in single districts were: (1) funding professional development, (2) offering mentoring for inexperienced personnel, and (3) providing stipends. For other professionals, the top three incentives were: (1) funding professional development, (2) improving salaries and benefits, and (3) provide stipends. The 2005 study provided a

more extensive listing of retention and recruitment strategies. However, the incentives selected as most successful in 2001 continued to be rated as relatively more effective than other strategies in 2005.

For teachers and other professionals in SSAs, the top three retention incentives reported in 2001 were: (1) funding professional development, (2) improving salaries and benefits, and (3) decreasing class size and case loads. These were also identified as important recruitment and retention strategies in the current study.

Use of Retention Strategies

Almost all (90 percent or more) of the single districts and SSAs used the eight strategies listed below to aid in retaining special education personnel, including providing:

- Adequate support from paraprofessionals,
- Adequate access to instructional resources and teaching materials,
- Adequate classroom space and equipment,
- Support relative to legal issues,
- Access to reliable computer technology to assist with paper work responsibilities,
- Opportunities for special education personnel in the district to meet and discuss common issues,
- Release time for professional development, and
- Informative, rather than evaluative, feedback regarding teaching.

One additional strategy was used by 95.1 percent of SSAs and 85.6 percent of single districts:

- Mentoring programs for new special education personnel.

There is considerable overlap between the most effective and most used retention strategies. Districts and SSAs appear to be using the strategies perceived as most effective in reducing turnover among special education personnel.

The least used retention strategy was providing funds for merit pay—2.9 percent of single districts and 8.3 percent of SSAs reported using this strategy. It is interesting to note that this approach was effective at a small to moderate level for single districts (mean rating 2.6), but effective to a small extent for SSAs (mean rating 2). Providing all faculty and staff with bonuses when a school meets certain performance criteria was used by 9.3 percent of single districts and 8.5 percent of SSAs. This retention strategy was effective to a small extent for single districts (mean rating 2.1), and effective at a small to moderate level for SSAs (mean rating 2.5). These two approaches to rewarding educators appear to have some potential for retaining special education personnel in either single districts or in SSAs.

Summary and Conclusions

Retention Difficulties

Retention difficulties were more likely to be reported for other professionals than for teachers. In addition, single districts and SSAs were more likely than SSA participant districts to experience difficulty in retaining special education personnel. However, even for those districts reporting less difficulty, investing in better ways to retain personnel is warranted since any improvement in retention results in a commensurate decrease in staffing shortages and recruitment efforts.

Barriers to Retention

For single districts and SSAs, the major barriers to retention for special education teachers reported in the current study were: overwhelming amount of required paperwork, job stress due to conflicting demands of the job and work overload, legal complexities of working in special education, insufficient prior experience working with particular disabilities, lower salary and/or benefits relative to that available in other local education agencies, lower salary and/or benefits relative to fields outside education, and inadequate stipends or supplements for special education assignments. For SSAs, the following also were barriers: excessive case loads or class size, inadequate training in core content subject areas, dissatisfaction with the assignment, feelings of professional isolation, and geographic location of the district.

Some of these barriers may be diminished through expanded implementation of retention strategies already in place. For example, the paperwork burden may be lightened by providing teachers with reliable computer technology designed for special education reporting. District staff members may be able to serve as resources for interpreting legal requirements governing special education services.

Other barriers relate more to the human resource management function and may be addressed through recruitment strategies and the selection process. Specifically, job candidates who would enhance the existing work team, who demonstrate commitment to the profession, and who have strong experience and training may be identified through sending special education personnel on recruiting trips, or using more sophisticated employee selection devices.

Removing barriers concerning lack of support from parents and general education teachers may require more creative approaches. Furthermore, expanded avenues of communication among special education personnel may be required to strengthen feelings of connection to the professional community within a district, SSA, or region. Some barriers may call for changes in funding priorities, such as decreasing class size and case loads. Although better compensation offered by competing organizations will always exist, changes in the structure of incentives and job assignments can potentially limit these barriers to retention as well as barriers relating to job stress and other aspects of the work itself. Release time in exchange for non-teaching responsibilities or professional development may be perceived by teachers as adequate non-monetary compensation for increased workloads.

For single districts and SSAs, the major barriers to retention for other special education professionals reported in the current study were: overwhelming amount of required paperwork, legal complexities of working in special education, job stress due to conflicting demands of the job and work overload, excessive case loads or class size, multiple-campus assignments, lower salary and/or benefits relative to fields outside education, lower salary and/or benefits relative to that available in other local education agencies, and inadequate stipends or supplements for special education assignments. SSAs also reported the following as barriers for other professionals: geographic location of the district, attractiveness of administrative positions relative to special education assignments, and feelings of professional isolation by personnel.

The major barriers to retention reported in 2001 also were reported among these retention barriers identified in the 2005 study. In addition, both teachers and other professionals shared the same barriers to retention in 2001 and in 2005. Some of these persistent barriers to retaining special education personnel may require different solutions than those currently in place.

To ameliorate threats to retaining qualified other professionals, districts and SSAs may need to provide additional support for these professionals in the areas of paperwork and legal and regulatory issues. Job sharing may address barriers relating to job stress, case loads and class size, and multiple-campus

assignments. Other strategies may require changes in funding priorities such as hiring more professional personnel and reducing case loads or providing release time to compensate for paperwork and other non-teaching responsibilities.

The barriers that appear to be particular to SSAs may require new ways of communicating attributes and needs of special education services to general education personnel. Informed general education personnel will have a better appreciation of the valued work other special education professionals perform, and the support they need to successfully serve their students. In addition, providing pay supplements may compensate for additional non-teaching duties, or make professional positions more attractive relative to administrative positions in special education.

Use of Retention Strategies

Almost all of the single districts and SSAs used the eight strategies listed below to aid in retaining special education personnel: adequate support from paraprofessionals; adequate access to instructional resources and teaching materials; adequate classroom space and equipment; support relative to legal issues; access to reliable computer technology to assist with paper work responsibilities; opportunities for special education personnel in the district to meet and discuss common issues; release time for professional development; and informative, rather than evaluative, feedback regarding teaching. One additional strategy was used by almost all of the SSAs—mentoring programs for new special education personnel.

Most Effective Retention Strategies

Almost all of the strategies were effective to some extent in retaining special education personnel. The most effective retention strategies reported for single districts included the following: adequate access to instructional resources and teaching materials, release time for professional development, financial support for professional development, adequate classroom space and equipment, adequate access to reliable computer technology to assist with paper work responsibilities, adequate support from paraprofessionals, support relative to legal issues, and clerical support to assist with paperwork responsibilities.

The most effective retention strategies for SSAs included the following: access to reliable computer technology to assist with paper work responsibilities, adequate access to instructional resources and teaching materials, financial support for professional development, and release time for professional development.

Some of the strategies rated as more effective appear to describe basic work conditions, which may not serve to alter personnel intentions to leave the job. However, they may be critical aspects of the work environment, since teachers and other professionals lacking these basic conditions will be more likely to consider alternative employment. For example, teachers and other professionals would expect to have adequate access to instructional resources as well as adequate classroom space and equipment. Providing better resources, space, and equipment may not serve to dissuade a teacher from leaving the job. On the other hand, not having the minimum instructional resources, space, and equipment may provide an incentive for a teacher to seek another position.

6. Special Education Teachers

In order to investigate the various issues that appear to influence turnover and retention of special education personnel, we surveyed a sample of special education teachers in Texas public schools. Respondents to our survey included 1,530 teachers in single districts (19.6 percent response rate), and 359 teachers working for SSAs or for SSA participant districts (26.2 percent response rate). Because the teachers in the latter group would typically be assigned to a particular campus or campuses, we felt their perceptions would be framed similarly by the campus environment. Thus, we treated teachers at SSAs or SSA participant districts as one group in our analyses. (Our final data base included usable surveys from 1,522 single district teachers and 357 SSA teachers.)

As noted in Section 2 of this report, respondents represented school districts and campuses throughout the state. They appeared to be very similar to the population of special education teachers in Texas public schools. Therefore, we believe that the results of the current study may be generalized to all special education teachers in Texas schools.

This section summarizes the results of the teacher survey regarding teacher preparation and qualifications, special education assignment and workload, and perceptions of the work environment. It also includes an assessment of teachers' intentions to quit or remain in the job during the next year.

Characteristics of Special Education Teachers

Demographic Characteristics

About 85 percent of the respondents from single districts were women, and about 90 percent of the SSA teachers were women (Table 6.1). Less than one-fourth of respondents from single districts (22.0 percent) reported being minority group members, and the proportion of minority group members working in SSAs was substantially smaller (7.3 percent). This demographic profile is similar to that of the larger teacher group that was sampled for the current study—the teachers surveyed were primarily white or Anglo, and female.

Table 6.1. Gender and Ethnicity of Special Education Teachers

	Teachers in Single Districts		Teachers in SSAs	
	Number	Percent	Number	Percent
Gender				
Female	1,290	85.2	321	90.4
Male	224	14.8	34	9.6
Total	**1,514**	**100.0**	**355**	**100.0**
Ethnicity				
African-American	114	7.6	6	1.7
Hispanic	164	10.9	14	4.0
White/Anglo	1168	78.0	328	92.7
Other	52	3.5	6	1.7
Total	**1,498**	**100.0**	**354**	**100.0**

Source. Special Education Teacher Survey.

The average age of special education teachers at single districts was 45.7 years of age; the youngest was 20 years old and the oldest was 78 years old. The average age of the special education teachers at SSAs was slightly higher—47.5, with a range from 25 to 76 years of age. Table 6.2 shows the distributions of teachers across age groups.

Table 6.2. Age Groups of Special Education Teachers

	Teachers in Single Districts		Teachers in SSAs	
Age Groups	Number	Percent	Number	Percent
25 years or younger	20	1.3	1	0.3
26-30 years	135	9.0	24	6.9
31-35 years	162	10.8	21	6.0
36-40 years	158	10.5	36	10.3
41-45 years	199	13.3	43	12.3
46-50 years	260	17.3	73	20.9
51-55 years	298	19.9	82	23.4
56-60 years	183	12.2	46	13.1
61-65 years	62	4.1	18	5.1
66 years or older	23	1.5	6	1.7
Total	**1,500**	**100.0**	**350**	**100.0**

Source. Special Education Teacher Survey.

Teaching Preparation

In an effort to describe the teaching preparation of special education teachers in Texas public schools, we asked the sample of teachers about their educational background, Texas teaching certifications, teacher training programs, and participation in mentoring and master teacher programs.

Education. For about half of special education teachers (45.0 percent of single district and 55.0 percent of SSA respondents), the highest educational degree obtained was a bachelor's degree (Table 6.3). Teachers in single districts were more likely than teachers in SSAs to have completed graduate coursework and graduate degrees (49.4 percent compared to 39.2 percent). About one in 20 teachers had additional graduate coursework beyond a master's degree, including a second master's, educational specialist degree, or doctorate.

Table 6.3. Education Level of Special Education Teachers

	Teachers in Single Districts		Teachers in SSAs	
Education Level	Number	Percent	Number	Percent
Doctorate	16	1.1	1	0.3
Working toward a doctorate	33	2.2	6	1.7
Educational Specialist degree	31	2.1	12	3.4
Master's degree	451	29.9	73	20.9
Working toward a Master's degree	262	17.4	58	16.6
Bachelor's degree	678	45.0	192	55.0
Second Bachelor's degree	31	2.1	6	1.7
Associate's degree	1	0.1	0	0.0
Some college/ university coursework	2	0.1	0	0.0
Other (typically 2nd Master's degree)	2	0.1	1	0.3
Total	**1,507**	**100.0**	**349**	**100.0**

Source. Special Education Teacher Survey.

Teacher certification. In terms of Texas teacher certification, 97.0 percent of single district respondents (1,476) and 97.5 percent of SSA respondents (348) reported holding a lifetime, standard, or both lifetime and standard teaching certificates (Table 6.4). A greater proportion of special education teachers in SSAs held lifetime teaching certification (69.2 percent) compared to teachers in single districts (62.0 percent). Since the lifetime certification was terminated in 1999, the relative proportions of teachers with lifetime and standard certificates indicates that teachers in SSAs have been working in special education for a longer period than teachers in single districts.

Table 6.4. Texas Teaching Certifications Held by Special Education Teachers

	Teachers in Single Districts		Teachers in SSAs	
Teaching Certificate	Number	Percent	Number	Percent
Lifetime Certificate (issued prior to 9/1/99)	943	62.0	247	69.2
Standard Certificate (issued after 9/1/99)	481	31.6	78	21.8
Both Lifetime and Standard Certificates	52	3.4	23	6.4
Probationary Certificate	41	2.7	4	1.1
Temporary Certificate	4	0.3	3	0.8
Temporary Permit (issued by school district)	1	0.1	0	.0
Emergency Permit (issued by school district)	6	0.4	2	0.6
Other Certification	24	1.6	4	1.1
Certification outside Texas	343	22.5	59	16.5

Source. Special Education Teacher Survey.
Note. There were1,522 respondents from single districts, and 357 respondents from SSAs. Percentages do not add to 100% as respondents were asked to mark all certifications that were applicable.

While few teachers reported holding other Texas teaching certificates, these teachers were most likely to hold a probationary certificate. The majority of teachers indicating they held a teaching certificate in the "other" category reported having bilingual and administrative certifications.

A greater proportion of special education teachers in single districts compared to teachers in SSAs reported having a teaching certificate from another state or a country besides the USA. Specifically, 22.5 percent of single district teachers reported they held a teaching certificate outside Texas. These 343

respondents held teaching certificates in one or more of 48 different states and territories of the USA, 21 different countries, and the Department of Defense school system. The most popular states in which to hold an additional certificate were Oklahoma (34 respondents), Illinois (26), Louisiana (24), New Mexico (24), and Colorado (20).

There were 16.5 percent of special education teachers in SSAs who reported holding a teaching certificate from outside Texas. These 59 respondents held teaching certificates in one or more of 29 different states in the USA. The most popular states in which to hold an additional certificate were Louisiana (7 respondents), New Mexico (7), Tennessee (5), and Kansas (5). (A complete listing of out-of-state teaching certificates held by single district and SSA teachers is presented in Appendix E.)

Special education teachers were also asked to indicate all the special education teaching certifications they held. More than 80 percent of the respondents indicated they held the special education certification for all grade levels (Table 6.5). About 8 to 10 percent of respondents reported having a supplemental special education certification that attaches to a basic certification in an area other than special education. About 12 to 13 percent of the teachers reported they held a special education certificate not listed in the survey. Certificates typical of those listed in this "other" category included certificates in speech and language therapy, generic special education for particular grade levels, emotional disturbances and autism, mental retardation, and learning disabilities.

Table 6.5. Texas Special Education Teaching Certifications of Special Education Teachers

	Teachers in Single Districts		Teachers in SSAs	
Teaching Certificate	Number	Percent	Number	Percent
Special Education (EC-12)	1,256	82.5	290	81.2
Special Education - Supplemental[a]	121	8.0	34	9.5
Special Education - Hearing Impaired	45	3.0	1	0.3
Visually Handicapped Endorsement or Delivery System (PK-12)	15	1.0	8	2.2
Other certifications in Special Education	192	12.6	43	12.0

Source. Special Education Teacher Survey.
Note. There were 1,522 respondents from single districts, and 357 respondents from SSAs.
[a]Attaches to base certificate other than special education.

Teacher training. At least two-thirds of the special education teachers received teacher training through an undergraduate college or university training program (Table 6.6). Slightly more teachers in SSAs received traditional preparation at the undergraduate level (70.3 percent) compared to teachers in single districts (61.2 percent).

Table 6.6. Teacher Preparation Program Completed by Special Education Teachers

	Teachers in Single Districts		Teachers in SSAs	
Education Level	Number	Percent	Number	Percent
Undergraduate college or university teacher training program	929	61.2	251	70.3
Post-baccalaureate college or university teacher training program (graduate school)	380	25.0	86	24.1
Alternative certification program offered by school district	87	5.7	6	1.7
Alternative certification program offered by education service center	285	18.7	60	16.8
Alternative certification program offered by college or university	117	7.7	25	7.0
Alternative certification program offered by private organization	36	2.4	2	0.6
Other teacher training program	41	2.7	11	3.1
No teacher training program completed	10	0.7	1	0.3

Source. Special Education Teacher Survey.
Note. For single districts, there were 1,522 teacher respondents; for SSAs, there were 357 teacher respondents.

Consistent with information from special education administrators, alternative certification programs are continuing to provide special education teachers for Texas public schools. The largest proportion of teachers who participated in alternative certification programs, completed programs offered by an education service center (18.7 percent of single district and 16.8 percent of SSA respondents).

Mentoring programs. Mentoring programs serve as a means of enhancing the success of new employees in an organization or a career, providing a social support system as well as access to work-related resources and coaching to improve or develop needed skills. In the current study, a greater proportion of special education teachers from single districts had participated in mentor programs compared to teachers from SSAs (34.2 percent and 26.9 percent, respectively). Overall, teachers reported spending an average of about 60 hours in their mentoring program, however, the majority of special education teachers reported program durations of 30 or fewer hours. There was considerable variation in the length of the programs. (See Table 6.7.)

Table 6.7. Teacher Participation in Mentoring Programs Early in Career

	Teachers in Single Districts		Teachers in SSAs	
	Number	Percent	Number	Percent
Participated in a mentor program				
Total	**521**	**34.2**	**94**	**26.9**
Number of hours in mentor program				
1-5 hours	41	14.3	8	17.4
6-10 hours	65	22.7	11	23.9
10-20 hours	65	22.7	9	19.6
21-30 hours	35	12.2	4	8.7
31-40 hours	19	6.6	2	4.4
41-50 hours	15	5.2	0	0.0
51-100 hours	26	9.1	6	13.0
More than 100 hours	20	7.0	6	13.0
Total	**286**	**100.0**	**46**	**100.0**

Source. Special Education Teacher Survey.
Note. For single districts, 521 of 1,496 respondents participated in a program; 286 provided data regarding the number of hours spent in the program. For SSAs, 94 of 350 respondents participated in a program; 46 provided data regarding the number of hours spend in the program.

Master teacher programs. While mentoring programs typically focus on inculcating novices into an organization or profession, some organizations offer programs for experienced professionals. These programs provide individuals with additional skills and opportunities to advance in their profession. For teachers who do not seek administrative roles within education, master teacher or other instructional leadership programs provide an important route to career development. For school districts, these programs may also serve to retain experienced special education professionals.

About one-third of special education teachers reported that they had participated in a master teacher or other instructional leadership program for experienced teachers (Table 6.8). Overall, teachers in single districts reported their master teacher programs were of longer duration (36.3 hours) than teachers in SSAs (31.9 hours). About two-thirds of programs in single districts were 20 hours or fewer in length, while three-fourths of the programs in the SSAs were 20 hours or fewer.

Table 6.8. Teacher Participation in Master Teacher or Other Leadership Programs for Experienced Teachers

	Teachers in Single Districts		Teachers in SSAs	
	Number	Percent	Number	Percent
Master teacher, mentor teacher, or other leadership training				
Total	**553**	**36.3**	**109**	**31.9**
Number of hours in leadership program				
1-5 hours	44	13.2	13	24.1
6-10 hours	89	26.7	14	25.9
10-20 hours	79	23.7	13	24.1
21-30 hours	35	10.5	6	11.1
31-40 hours	30	9.0	6	11.1
41-50 hours	11	3.3	0	0.0
51-100 hours	27	8.1	1	1.9
More than 100 hours	18	5.4	1	1.9
Total	**333**	**100.0**	**54**	**100.0**

Source. Special Education Teacher Survey.
Note. For single districts, 553 of 1,445 respondents participated in a program; 333 provided data regarding the number of hours spent in the program. For SSAs, 109 of 342 respondents participated in a program; 54 provided data regarding the number of hours spent in the program.

Teaching Experience

We asked special education teachers about the number of years they had taught overall, as well as the number of years they taught special education, and the number of years they taught at the elementary and secondary levels. As a whole, the special education teachers had a great deal of teaching experience (Table 6.9). On average, teacher respondents from single districts had taught 14.1 years, with some teachers reporting having taught a total of 49 years. Similarly, teacher respondents from SSAs had taught an average of 15.4 years, with some teachers reporting having taught a total of 38 years.

Table 6.9. Average Years Teaching Experience for Special Education Teachers

	Teachers in Single Districts (n=1,438)			Teachers in SSAs (n=340)		
Years Teaching	Mean	SD	Range	Mean	SD	Range
Special Education	11.0	8.2	0-45	11.7	7.7	1-34
Elementary level	8.3	9.0	0-49	8.8	8.9	0-36
Secondary level	5.2	7.5	0-38	6.3	7.5	0-34
Current job	6.8	6.2	0-45	7.9	6.6	0-31
Total	**14.1**	**9.5**	**1-49**	**15.4**	**9.0**	**1-38**

Source. Special Education Teacher Survey.
Note. SD is standard deviation.

Novice teachers—those with less than four years total teaching experience—comprised a small portion of all the teachers. Specifically, 11.1 percent of the respondents from single districts were novice teachers, and an even smaller proportion of respondents from SSAs were novice teachers (6.5 percent). About one-fourth of teachers in single districts and about one-sixth of teachers in SSAs reported five or fewer years total teaching experience. Since a large proportion of teachers leave teaching within their first five years, this is a critical period for retention efforts. Given the data reported here, retention programs may need to target as much as one-fourth of the special education teachers in their districts or SSAs. (See Table 6.10.)

Table 6.10. Teaching Experience of Special Education Teachers

Teaching Experience	Teachers in Single Districts		Teachers in SSAs	
	Number	Percent	Number	Percent
Total years working as a teacher in a public or private school				
0-3 years	159	11.1	22	6.5
4-5 years	173	12.0	37	10.9
6-10 years	312	21.7	64	18.8
11-15 years	234	16.3	66	19.4
16-20 years	200	13.9	52	15.3
21-25 years	135	9.4	43	12.7
26-30 years	139	9.7	33	9.7
More than 30 years	86	6.0	23	6.8
Years teaching in SpEd				
0 to 3 years	257	17.9	41	12.1
4-5 years	214	14.9	52	15.3
6-10 years	373	25.9	88	25.9
11-15 years	235	16.3	60	17.7
16-20 years	154	10.7	55	16.2
21-25 years	102	7.1	19	5.6
26-30 years	70	4.9	16	4.7
More than 30 years	33	2.3	9	2.7
Years in current SpEd teaching job				
0 to 3 years	537	37.3	96	28.2
4-5 years	318	22.1	75	22.1
6-10 years	307	21.4	83	24.4
11-15 years	132	9.2	42	12.4
16-20 years	74	5.2	25	7.4
21-25 years	38	2.6	8	2.4
26-30 years	19	1.3	8	2.4
More than 30 years	13	0.9	3	0.9

Source. Special Education Teacher Survey.

Special education experience. About one-fourth of teacher respondents indicated they had between six and ten years of teaching experience in the field of special education. However, many experienced teachers reported being new to this field. Almost one-fifth of single district teachers indicated they had three or fewer years special education teaching experience. A smaller proportion of respondents from the SSAs were new to the special education field (about one-eighth of respondents).

Slightly more than one-third of single district teachers, and slightly less than one-third of teachers in SSAs indicated that they were in their current job for three or fewer years. These data, in combination with the data indicating that special education teachers typically have many years of teaching experience, suggests that a number of special education teachers move between jobs. This is consistent with special education administrators' perceptions that special education personnel who leave their jobs tend to leave for similar positions in other school districts (see Section 4 of this report).

About three-quarters of special education teachers have teaching experience at the elementary level (Figure 1 and Table 6.11). On average, special education teachers in single districts had taught in the elementary grades for 8.3 years while those in SSAs had taught 8.8 years. Slightly more than half of single district teachers, and about two-thirds of teachers in SSAs had taught at the secondary level (Figure 2 and Table 6.11). Single district special education teachers reported teaching an average of 5.2 years at the secondary level, while teachers in SSAs had taught an average of 6.3 years.

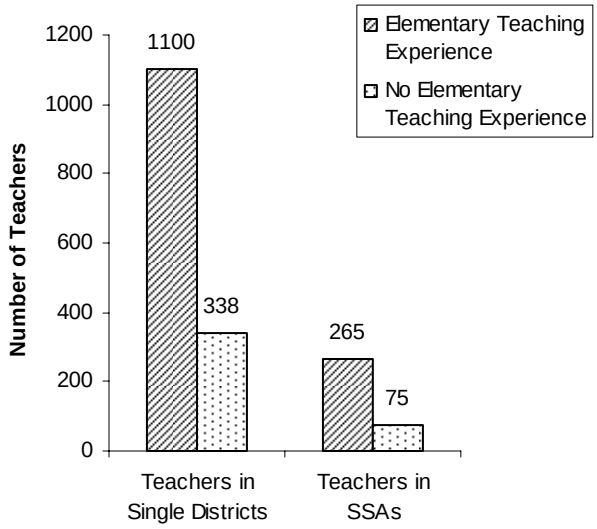

Figure 1. Special education teachers' experience at the elementary level.

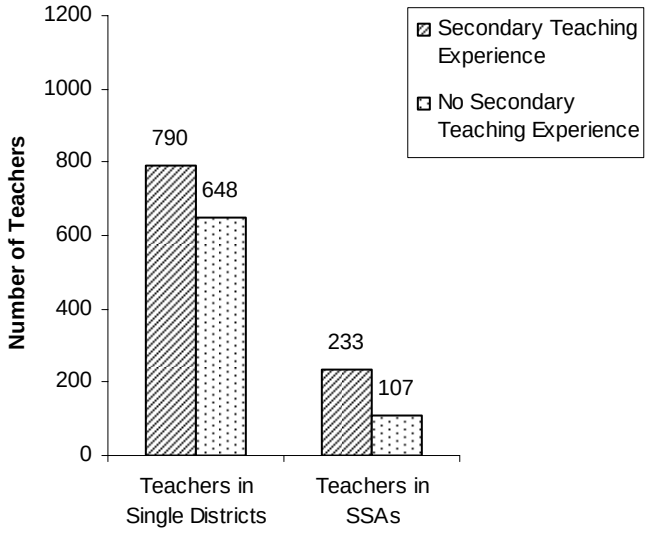

Figure 2. Special education teachers' experience at the secondary level.

Table 6.11. Teaching Experience at Elementary and Secondary Levels for Special Education Teachers

	Teachers in Single Districts		Teachers in SSAs	
Teaching Experience	Number	Percent	Number	Percent
Years teaching at the elementary level				
1-3 years	253	23.0	44	16.6
4-5 years	158	14.4	40	15.1
6-10 years	260	23.6	75	28.3
11-15 years	142	12.9	39	14.7
16-20 years	106	9.6	23	8.7
21-25 years	77	7.0	15	5.7
26-30 years	72	6.6	24	9.1
More than 30 years	32	2.9	5	1.9
Total	**1,100**	**100.0**	**265**	**100.0**
Years teaching at the secondary level				
1-3 years	208	26.3	65	27.9
4-5 years	124	15.7	32	13.7
6-10 years	179	22.7	50	21.5
11-15 years	122	15.4	46	19.7
16-20 years	72	9.1	17	7.3
21-25 years	39	4.9	15	6.4
26-30 years	29	3.7	5	2.2
More than 30 years	17	2.2	3	1.3
Total	**790**	**100.0**	**233**	**100.0**

Source. Special Education Teacher Survey.

Highly qualified teachers. In assessing special education teachers' education and preparation, we posed an additional research question, "Given those special education teachers who provide basic instruction in a core subject, what proportion might be considered highly qualified based on the current federal and state regulations?" Current interpretations of the No Child Left Behind (NCLB) Act of 2001 require teachers in core subjects to meet particular criteria which ensure that these teachers are highly qualified to teach their subject. In order to be considered highly qualified at the *elementary level*, teachers who provide basic instruction in a core subject may prove competency in their subject area through one of the following generalized approaches: (a) have a bachelor's degree, Texas teaching certificate, college major in the subject, and one year of teaching experience; or (b) have a bachelor's degree, Texas teaching certificate, and a combination of college courses and professional development activities in the subject; or (c) have a bachelor's degree, Texas teaching certificate, and passing grade on a state certification exam in the subject.

At the *secondary level*, teachers who provide basic instruction in a core subject may prove competency in their subject area through one of the following generalized routes: (a) have a bachelor's degree, Texas teaching certificate, and college major in the subject; or (b) have a bachelor's degree, Texas teaching certificate, a combination of college courses and professional development activities in the subject, and one year teaching experience in the subject; or (c) have a bachelor's degree, Texas teaching certificate, and passing grade on state certification exam on the subject.

As noted above, special education teacher respondents provided data regarding their education and teaching certifications, and their experience teaching at the elementary and secondary levels. Teachers also indicated whether or not they (a) were currently providing basic instruction in any of the core

subjects such as English/language arts, math, science, and social studies, (b) had majored in or completed college courses or professional development in any of the core subjects, and (c) had passed a content-area state certification exam in any of the core subjects. Using these data, we devised an algorithm to identify those teachers who were likely to be highly qualified based on the state and federal interpretation of the NCLB guidelines during the fall of 2005 (TEA, October 24, 2005).

Results of this analysis are presented below (Tables 6.12 and 6.13). These assessments of the degree to which special education teachers are highly qualified are intended to be rough estimates only. There are several reasons that preclude definitive conclusions regarding the teachers who met the highly qualified requirements. First, the survey asked general questions about teacher education, certification, and current assignment. In order to ascertain whether or not a particular teacher has met the highly qualified standards, we would need much more detailed data. Additionally, the state and federal guidelines interpreting NCLB may change over time. The current analysis uses a general summary of guidelines distributed during the fall of 2005. Second, in making our estimates we assumed that all teachers who indicated they provided basic instruction in a core subject were the *teachers of record* for those classes. A large proportion of the teacher respondents were probably not the teacher of record for those classes, and thus the requirement that they meet the highly qualified standards may not be applicable. Third, the data are only accurate to the degree that respondents were careful in completing the survey. Lastly, while we believe the special education teachers responding to the survey were representative of public school teachers in the special education field in Texas, it is possible that our respondents may differ from special education teachers as a whole in some of the areas being studied. In summary, our analysis represents an approximation of the degree to which special education teachers meet the current highly qualified standards.

Table 6.12. Highly Qualified Special Education Teachers at Elementary Level

Core Subject	Provide Basic Instruction in Subject	Bachelor's Degree, Texas Certificate, and			Highly Qualified	
		Major, 1 Year Exper.	Courses, PD	Exam		
Single Districts						
English/ Language Arts	785	42	302	161	505	65.6%
Math	752	17	324	116	457	60.8%
Science	418	11	138	50	199	47.6%
Social Studies	422	13	141	54	208	49.3%
SSAs						
English/ Language Arts	185	20	70	37	127	68.6%
Math	183	7	81	26	114	62.3%
Science	69	6	14	8	28	40.6%
Social Studies	66	5	20	9	34	51.5%

Source. Special Education Teacher Survey.
Note. Exper. is experience teaching, PD is professional development, Exam is state certification examination. Data for this table was provided by 1,522 teacher respondents from single districts and 357 teacher respondents from SSAs.

At the *elementary level* (Table 6.12), more than one-third to more than two-thirds of special education teachers in single districts who indicated they provided basic instruction in a core subject appeared to meet the highly qualified criteria for that subject. More teachers in English/language arts and math met these criteria than teachers in science and social studies. This pattern was repeated for special education teachers in SSAs, however, the proportion of teachers likely to be highly qualified in science was lower than for teachers of science in single districts.

At the *secondary level*, more than half of the teachers in single districts who taught English, reading and language arts, or math appeared to meet the highly qualified standards (Table 6.13). One-third or more of the teachers who taught science, civics and government, or geography appeared to meet the highly qualified standards. One-fourth or less of the teachers who taught arts or foreign languages appeared to meet the highly qualified standards.

Table 6.13. Highly Qualified Special Education Teachers at Secondary Level

Core Subject (and Related Fields)	Provide Basic Instruction	Bachelor's Degree, Texas Certificate, and			Highly Qualified	
		Major	Courses, PD, 1 Year Exper.	Exam		
Single Districts						
English (1)	238	22	88	34	144	60.5%
Reading/ Language Arts (1)	220	16	86	30	132	60.0%
Civics and Government (2)	73	6	14	10	30	41.1%
Economics (2)	62	4	13	4	21	33.9%
Geography (2)	95	7	22	8	37	38.9%
History (2)	140	15	35	17	67	47.9%
Arts (3)	43	0	7	4	11	25.6%
Science (4)	146	6	47	7	60	41.1%
Mathematics (5)	224	9	103	12	124	55.4%
Foreign Languages	24	1	3	1	5	20.8%
SSAs						
English (1)	23	1	7	2	10	43.5%
Reading/ Language Arts (1)	95	1	37	6	44	46.3%
Civics and Government (2)	99	8	33	12	53	53.5%
Economics (2)	49	10	7	5	22	44.9%
Geography (2)	24	3	7	2	12	50.0%
History (2)	9	1	2	0	3	33.3%
Arts (3)	105	12	3	5	20	19.0%
Science (4)	3	0	0	1	1	33.3%
Mathematics (5)	51	4	10	5	19	37.3%
Foreign Languages	35	2	8	2	12	34.3%

Source. Special Education Teacher Survey.
Note. Major is college major in subject, PD is professional development, Exper. is experience teaching, Exam is state certification examination. Related fields may include (1) Reading, English, Speech, Journalism, Language Arts; (2) Geography, Government, Economics, Political Science, History; (3) Music, Theater, Dance, Art; (4) Life Science, Physical Science, Biology, Earth Science, Physics, Chemistry, Science; (5) Engineering, Statistics, Accounting, Mathematics. Data for this table was provided by 1,522 teacher respondents from single districts and by 357 teacher respondents from SSAs.

The proportions of secondary teachers in SSAs who appeared to meet the highly qualified standards in English, reading and language arts, or math were smaller than for teachers in single districts at the secondary level. However, overall, higher proportions of teachers in SSAs appeared to meet the standards—one-third to slightly more than half of the teachers who taught a particular academic subject appeared to meet the highly qualified standards for that subject. In only one core subject—arts—was there less than one-fourth who appeared to meet the standards.

Special Education Assignment

In order to describe the work of special education teachers in Texas, we asked the sample of teachers to indicate the age of the students with whom they worked, and the primary disabilities of their students. In addition, we asked teachers how many students they served and the teaching arrangement or setting in which they work with students. To estimate the overall workload of special education teachers, we asked teachers to indicate the number of hours they spent each month on a variety of non-teaching tasks associated with their teaching assignment. These data are summarized in this section of the report.

Student Characteristics

Teachers in the survey sample reported the ages of their students, and these data are presented by age grouping in the table below (Table 6.14). Teachers typically taught students at a variety of age levels. A majority of the single district teacher respondents worked with students who were 9 to 12 years of age. Slightly less than half of the teachers worked with students 5 to 8 years of age, and students 13 to 16 years of age.

Table 6.14. Ages of Special Education Students Served by Special Education Teachers

	Teachers in Single Districts		Teachers in SSAs	
Age Group of Students Served	Number	Percent	Number	Percent
1-4 years old	163	10.7	35	9.8
5-8 years old	707	46.5	155	43.4
9-12 years old	953	62.6	229	64.1
13-16 years old	686	45.1	211	59.1
17-20 years old	337	22.1	110	30.8
21 year or older	123	8.1	14	3.9
Total	**1,522**	**--**	**357**	**--**

Source. Special Education Teacher Survey.
Note. Percentages total more than 100% because some teachers serve students in more than one age group.

A majority of teacher respondents in SSAs taught students in the 9 to 12 years, and 13 to 16 years old categories. Less than half worked with students 5 to 8 years old, and slightly less than one-third worked with students 17 to 20 years old. SSA teachers were less likely to work with students 21 years or older, than single district teachers, but more likely to serve 17 to 20 year olds.

In addition to describing the ages of their special education students, teachers indicated the primary disabilities of the students with whom they worked (Table 6.15). In order to avoid counting students who may have been listed under more than one primary disability, or students who were not provided with direct services, we analyzed data from teacher respondents who (a) provided disability data for their students, and (b) reported the total number of students separately from the number of students by disability. We were able to include data from 1,102 of the 1,522 single district teacher respondents, and 268 of the 357 teacher respondents.

Table 6.15. Disabilities of Special Education Students Served by Special Education Teachers

Primary Disability of Student	Teachers in Single Districts		Teachers in SSAs	
	Number of Students Served	Percent of All Students Served	Number of Students Served	Percent of All Students Served
Specific learning disability	15,708	57.9	4,805	69.5
Emotional disturbance (or behavioral impairment)	2,472	9.1	457	6.6
Mental retardation (cognitive or intellectual impairment)	2,066	7.6	386	5.6
Other health impairment (or chronically ill or medically fragile)	1,897	7.0	425	6.1
Multiple disabilities (combination which severely impairs performance)	1,239	4.6	285	4.1
Autism (or pervasive developmental disorder)	1,175	4.3	156	2.3
Speech or language impairment	1,121	4.1	157	2.3
Developmental delay or preschool disabled (included early childhood)	360	1.3	54	0.8
Auditory impairment (or deafness)	330	1.2	43	0.6
Orthopedic impairment	221	0.8	42	0.6
Visual impairment (or blindness)	194	0.7	41	0.6
Traumatic brain injury	137	0.5	24	0.3
Deaf-blind	17	0.1	3	0.0
Other disability not listed above	203	0.7	34	0.5
Total - Special Education Students Served	**27,140**	**100.0**	**6,912**	**100.0**

Source. Special Education Teacher Survey.

Note. For single districts, data regarding students served was provided by 1,102 teacher respondents. For SSAs, data regarding students served was provided by 268 teacher respondents.

The overwhelming majority of students served by teachers in this survey were students whose primary disability was a specific learning disability. This characteristic of the students served was even more pronounced for SSA and SSA participant teachers—69.5 of students served had a specific learning disability as their primary disability (57.9 percent of students served by single district teachers had the same primary disability). By means of comparison, teachers served eight to ten times as many students with learning disabilities as those with the next most frequently identified primary disability. For example, in single districts, 9.1 percent of the students served had a behavioral impairment (emotional disturbance) as their primary disability; 7.6 percent of the students were mentally retarded; and 7.0 percent had another health impairment or chronic illness. No other primary disability category was larger than these three. This pattern was even more extreme among SSAs where the next most frequently identified primary disabilities represented smaller groups of students served. Specifically, 6.6 percent of the students served by teachers in SSAs had a behavioral disorder (emotional disturbance) as their primary disability, 5.6 percent of the students had mental retardation, and 6.1 percent had another health impairment or chronic illness.

Based on the numbers of students teachers reported serving by primary disability category, we estimate that special education teachers serve an average of 25 students (Table 6.16). This is true for both single district teachers and those in SSAs. Approximately three-fourths of teachers work with 30 students or fewer. However, about 10 percent of the teachers serve more than 50 students. Surprisingly, 27 teachers reported providing direct services to more than 100 special education students.

Table 6.16. Number of Students Served by Special Education Teachers

	Teachers in Single Districts		Teachers in SSAs	
Number of Students Served	Number	Percent	Number	Percent
1-10 Students	374	33.9	63	23.5
11-20 Students	311	28.2	65	24.3
21-30 Students	168	15.2	67	25.0
31-40 Students	78	7.1	22	8.2
41-50 Students	57	5.2	24	9.0
51-60 Students	42	3.8	12	4.5
61-100 Students	49	4.4	11	4.1
More than 100 Students	23	2.1	4	1.5
Total	**1,102**	**100.0**	**268**	**100.0**
Average number of special education students served by each teacher respondent	24.6	--	25.8	--

Source. Special Education Teacher Survey.
Note. For single districts, data regarding students served was provided by 1,102 teacher respondents; 27,140 total students were served by these respondents. For SSAs, data regarding students was provided by 268 teacher respondents; 6,912 total students were served by these respondents.

Teaching Arrangements and Workload

Teachers reported the proportion of their time spent in each of the various teaching arrangements designed to serve special education students. The table below shows the average percentage of time teachers spent teaching in each of the various arrangements (Table 6.17). On average, teachers in single districts spent more than one-third of their time in resource classes or in self-contained classes. In SSAs, teachers typically spent more than half of their time in resource classes, and almost one-fourth of their time in self-contained classes.

Table 6.17. Special Education Teachers: Percent of Time Spent in Teaching Arrangement

Teaching Arrangement	Teachers in Single Districts	Teachers in SSAs
Resource classes	36.9	53.0
Self-contained classes	36.5	23.6
Non-special education setting (including in-class support/ inclusion and co-teaching)	13.0	5.0
Content mastery setting	11.0	18.2
Community-based settings	2.1	0.9
Home-based settings	0.5	0.9
Other settings	33.1	25.9

Source. Special Education Teacher Survey.
Note. For single districts, respondents to questionnaire items varied from 1,377 to 1,512, (except for the "other settings" category which had 221 respondents). For SSAs, respondents to questionnaire items varied from 314 to 339 (except for the "other settings" category which had 52 respondents). The "other settings" category included individual and classroom settings, as well as non-teaching duties related to teaching, administrative assignments, traveling between campuses, etc. Because the percentages are averaged across respondents, totals do not sum to 100%.

In addition to reporting the proportion of time they spent in particular teaching arrangements, we asked teachers to indicate the number of classes they taught, and the number of hours they spent on teaching-related and administrative tasks (Table 6.18). Based on the number of hours teachers reported in each of the various non-instructional tasks, we calculated the average time teachers spent on each task. As expected, the greatest proportion of time spent on non-instructional tasks was spent planning instruction—slightly more than one-third of the time outside direct teaching. The next task to which teachers devoted considerable time was completing required paperwork, including developing Individualized Education Programs (IEPs). Slightly more than one-fourth of teachers' time outside working directly with students was spent on this task. About 13 percent of teachers' non-instructional time was spent serving on Admission, Review, and Dismissal (ARD) committees.

In order to better describe the workload for special education teachers, we computed the total hours teachers reported spending on non-instructional tasks each month. On average, our estimates suggest that teachers in single districts spent an average of 57.9 hours on non-instructional tasks associated with their special education position. Teachers in SSAs spent about the same time (55.3 hours) on non-instructional tasks.

Table 6.18. Monthly Non-Instructional Workload of Special Education Teachers

Non-Instructional Tasks	Teachers in Single Districts		Teachers in SSAs	
	Average Hours Per Month	Average % of Non-Instructional Hours	Average Hours Per Month	Average % of Non-Instructional Hours
Planning instruction	18.6	33.9	18.9	37.1
Completing paperwork related to your work with disabled students (including IEP development)	16.9	28.1	16.1	27.8
Serving on ARD committees	7.3	12.8	7.4	13.8
Meeting with other special education teachers on lesson planning, curriculum development, guidance and counseling, etc.	4.4	7.3	3.7	6.2
Meeting with general education teachers on lesson planning, curriculum development, guidance and counseling, etc.	4.3	7.1	4.1	7.0
Serving on school or district committees for curriculum design, discipline policy development, selection of teaching materials, and related instructional issues	3.0	5.2	2.4	4.7
Attending special education departmental meetings	2.6	4.9	1.9	3.4
Maintaining contacts with community resources that support special education	2.2	3.3	2.5	3.3
Providing in-service or other presentations on special education topics for the general education faculty in my school	1.0	1.5	0.7	1.1
Total Non-Instructional Workload Estimate	**57.9**	--	**55.3**	--

Source. Special Education Teacher Survey.
Note. For single districts, data were provided by 1,313 to 1,497 respondents; for SSAs, data were provided by 294 to 347 respondents.

Special Education Work Environment

Administrative and Instructional Support

The work environment of special education teachers encompasses more than the students with whom they work, the classes they teach, the related activities in which they are engaged, and the hours they devote to their work tasks. It also includes the administrative setting and the instructional support system (Billingsley, 1993, 2004; Brownell & Smith, 1993; Gersten, et al., 2001; Stempien & Loeb, 2002). We asked teachers in our survey sample to respond to several questionnaire items describing the school climate at their campus or district. Each item was rated on a 6-point agreement scale (1=*strongly disagree*, 2=*disagree*, 3=*disagree somewhat*, 4=*agree somewhat*, 5=*agree*, 6=*strongly agree*). The table below reports the average teacher ratings for items relating to administrative supervision, resources needed for instruction as well as non-instructional tasks, and support for special education teaching (Table 6.19).

Table 6.19. Special Education Teachers: Mean Ratings of Work Conditions

Work Condition	Teachers in Single Districts	Teachers in SSAs
Supervision		
My principal provides opportunities for teachers to be involved in decision making at my school.	4.3	4.5
Policies are applied consistently at my school.	3.7	3.9
My principal or other school administrator works with me to solve instructional and behavioral problems.	4.3	4.6
My special education supervisor at the district level supports me.	4.4	4.8
Resources		
I have access to the instructional resources and teaching materials I need for my work with special education classes.	4.2	4.5
I have access to reliable computer technology to assist with my special education paperwork responsibilities.	4.5	4.7
I have clerical or other staff support to assist with my paperwork responsibilities in special education.	2.5	2.5
Teaching		
I am able to spend adequate time working directly with my students who have disabilities.	4.1	4.2
I have ample opportunity to assess the growth and progress of the special education students with whom I work.	4.4	4.5

Source. Special Education Teacher Survey.
Note. Mean rating (level of agreement) was based on a 6-point scale where 1=*strongly disagree*, 2=*disagree*, 3=*disagree somewhat*, 4=*agree somewhat*, 5=*agree*, 6=*strongly agree*. For single districts, the number of respondents for each item ranged from 1,459 to 1,498 teachers. For SSAs, the number of respondents for each item ranged from 348 to 356.

Supervision. In terms of supervision, special education teachers appear to agree somewhat that their principal or other school administrator includes teachers in the campus decision making process, and assists the special education teacher to resolve student issues that arise during the school year. They also agree somewhat that their special education supervisor at the district or SSA level provides support. Teachers in SSAs reported slightly higher agreement regarding these work conditions. Both teachers in single districts and those in SSAs expressed moderate disagreement that policies are applied consistently at their campus.

Resources. Relative to resources, teachers agree somewhat that they have access to instructional resources and teaching materials needed for teaching special education students, and access to computer technology to aid in completing paperwork required to document special education student instructional plans and progress. Teachers' ratings, however, indicate that they do not have much clerical support to assist with these paperwork responsibilities.

Teaching. Two critical issues that are important to special education teachers are (a) the degree to which they can spend time working directly their students, and (b) the degree to which they have an opportunity to see each student improve on his or her skills over time. Teachers responding to the current study agree somewhat that they are able to do these two things.

Human Resources Policies

Another aspect of the school work environment is the degree to which human resource policies support and encourage effective teaching and other successes in the schools. While human resource management practices in organizations are often designed to attract or retain particular groups of employees, other practices—compensation and reward systems, in particular— are used to communicate an organization's goals to employees, and to motivate employee performance toward those goals. Some public school districts and campuses in Texas provide financial or other rewards that serve to attract, retain, or motivate teachers. These rewards may include compensation such as extra pay for taking on additional responsibilities, bonuses for overall school performance on statewide student assessments, or stipends for assignment to special education as an area of teacher shortages.

We asked special education teachers to indicate whether or not their school utilized each of six different compensation practices (Table 6.20). Almost half of the teacher respondents from single districts reported that their district provided pay supplements or stipends for special education personnel. Approximately one-fourth of the teacher respondents from single districts indicated their schools paid for additional responsibilities outside the classroom such as serving on committees, developing new curricula, being a master teacher, or mentoring a novice teacher.

About one-fourth of the single district respondents also indicated their school district provided some form of skill-based or knowledge-based pay, wherein teachers are given a pay increase, or bonus when they pass additional state certification tests, pass college courses, obtain advanced degrees, or complete professional development activities that enhance their special education expertise. About one-fifth of the single district respondents reported that they may receive a reduced teaching load or release time to compensate for additional non-teaching responsibilities such as serving on committees and developing new curricula. One-tenth of the single district teachers reported that all faculty and staff in their school receive a bonus when the school meets specified performance criteria.

Only 2 percent of the respondents reported that their school or district provided merit pay for superior teacher performance. While this proportion is small, it represents 34 single districts in Texas public schools that are using performance-based pay to motivate teachers. This is a particularly critical area for future research, given the debate over the utility of using this approach to achieve objectives as diverse as increasing student scores on the statewide assessments, and graduating a greater proportion of students from high school. Research should investigate the types of performance criteria used by schools and districts offering merit pay, and the degree to which teachers are successful in achieving those criteria and earning the associated merit pay.

Table 6.20. Special Education Teachers: Compensation-Related Practices Used in Districts

Compensation Practice	Teachers in Single Districts		Teachers in SSAs	
	Number	Percent	Number	Percent
Pay supplements and/or stipends	680	45.5	39	11.1
Pay for additional work outside the classroom (serving on committees, developing new curricula, being a master teacher or mentor, etc.)	368	24.4	55	15.4
Pay incentives for increased knowledge in the field (pass additional state certification tests, college courses, advanced degrees, and/or professional development relating to special education)	340	22.7	48	13.5
Reduced class or case loads or release time to compensate for non-teaching responsibilities	274	18.2	43	12.1
Bonus when the school meets certain performance criteria	156	10.4	13	3.4
Merit pay for special educators that do an exemplary job	34	2.3	4	1.1

Source. Special Education Teacher Survey.
Note. For single districts, the number of respondents for each questionnaire item ranged from 1,494 to 1,506. For SSAs, respondents ranged from 351 to 356. Numbers and percentages represent respondents indicating their district offered the compensation described; the remaining respondents reported their district did not offer the compensation, or they reported that they did not know if the compensation was offered.

Teacher respondents from SSAs were much less likely than their single district counterparts to report that their districts provided additional financial or non-financial compensation to special education teachers or to all the teachers for additional responsibilities, increased education or skills, or school performance. Expanding any of these compensation practices in the SSAs may be useful in attracting qualified applicants, as well as retaining effective special education teachers.

Perceptions of Special Education and the Job of Teaching

The research investigating employee attitudes indicates that employee job satisfaction is a strong predictor of intention to quit or remain in the job (Hom, et al., 1994). Since human behavior is preceded by intentions, we expect special education teachers who are dissatisfied with their job, will be likely to quit the job. We asked special education teachers to indicate the degree to which they agreed with the following question: "All things considered, I am satisfied with my current job." (Rusbult & Farrell, 1983). Respondents used a 5-point rating scale in which high scores represent high agreement with the statement, and a high degree of job satisfaction (1= *strongly disagree*, 2=*disagree*, 3=*neutral*, 4=*agree*, 5=*strongly agree)*. Approximately 65 percent of special education teachers from single districts reported agreement or strong agreement with the question (Table 6.21). Thus, the majority of teachers were satisfied with their jobs.

Table 6.21. Overall Job Satisfaction of Special Education Teachers

Job Satisfaction Rating Level	All Teachers %	Novice Teachers %	Experienced Teachers %
Single Districts			
Strongly disagree	4.3	6.0	3.8
Disagree	10.7	10.2	10.9
Neutral	19.0	19.9	18.9
Agree	50.2	49.4	51.3
Strongly agree	15.0	14.5	15.2
Average Rating	**3.6**	**3.6**	**3.6**
SSAs			
Strongly disagree	3.7	9.1	3.5
Disagree	10.0	9.1	9.7
Neutral	19.7	18.2	19.2
Agree	52.7	59.1	52.8
Strongly agree	14.0	4.5	14.8
Average Rating	**3.6**	**3.4**	**3.7**

Source. Special Education Teacher Survey.
Note. Novice teachers comprise teachers who indicated they worked as a teacher in a public or private school for less than 4 years; experienced teachers are those who indicated they worked as a teacher for 4 or more years. Overall Job Satisfaction was measured with the statement "All things considered, I am satisfied with my current job." (Adapted from Rusbult, & Farrell, 1983). Ratings were based on a 5-point scale where 1= *strongly disagree*, 2=*disagree*, 3=*neutral*, 4=*agree*, 5=*strongly agree*. For single districts there were 1,509 teachers, including 166 novice and 1,266 experienced. Numbers do not sum to 1,509 due to missing data for teaching experience. For SSAs there were 357 teachers, including 22 novice and 318 experienced. Numbers do not sum to 357 due to missing data for teaching experience.

Overall, about 4 percent of the special education respondents reported strong disagreement with the satisfaction question. These were the teachers who were dissatisfied with their jobs, and thus most likely to quit. Differences between novice and experienced teachers were observed for this level of satisfaction rating—3.8 percent of experienced teachers and 6.0 percent of novice teachers strongly disagreed with the item. Thus, it appears more likely that novice teachers will leave their jobs than will teachers with four or more years teaching experience. These findings are consistent with other research in Texas public schools indicating that teachers are more likely to leave within the first five years of teaching (Herbert & Ramsay, September, 2004).

Interestingly, about one-fifth of the teacher survey respondents from single districts indicated that they neither agreed nor disagreed with the statement regarding job satisfaction. This is a relatively large proportion of respondents, and represents a group that perceives few sources of job satisfaction in their current job. Respondents in this group may not be deeply attached to their jobs, and thus may be potential job leavers.

We conducted a subgroup analysis for these 289 single district respondents. Results indicated that special education teachers who were neither satisfied nor dissatisfied with their job appeared to be similar to all single district respondents relative to demographic characteristics, education level, and teaching experience. The one area in which teachers who were neutral about the job differed from all teacher respondents was in plans for leaving the current job. For teachers with a neutral job attitude, 43.9 percent planned to leave their job (127 leavers out of 289 respondents with neutral job attitude). For all single

district special education teachers, 33.4 percent planned to leave their job (509 leavers out of 1,522 total respondents). Thus, special education teachers who are ambivalent about their job are somewhat more likely to leave than special education teachers in general. In addition, it is more likely that these teachers will take administrative positions within their district than will special education teachers generally. In particular, 21.3 percent of teachers who felt neutral about their job indicated they planned to take an administrative position in their own district. For all respondents, 13.9 percent indicated they planned to leave for this reason. It appears that when special education teachers are neither satisfied nor dissatisfied with their job, they are more likely to be attracted to administrative positions.

The pattern of job satisfaction results for special education teachers in SSAs is the same as that for survey respondents from single districts. However, the differences between novice and experienced teachers are more pronounced for the teachers in SSAs. The proportion of experienced teachers who strongly disagreed with the statement that they were generally satisfied with their job was about the same for SSA teachers (3.5 percent) as for single district teachers (3.8 percent). However, novice teachers in SSAs were more likely than single district teachers to be dissatisfied. Specifically, 9.1 percent of SSA respondents strongly disagreed with the job satisfaction statement, and 6.0 percent of single district respondents strongly disagreed with the statement. In addition, a smaller proportion of novice teachers (4.5 percent) reported strong agreement with the job satisfaction statement compared to experienced teachers in SSAs, and both novice and experienced teachers in single districts (all about 15 percent).

Intention to Quit or Remain in the Job

In the current study, we were interested in deriving an estimate of the turnover for special education teacher respondents. We also wished to identify the type of organizations that were successful in recruiting special education teachers away from their current jobs. To this end, we asked teachers—those who were planning to leave their jobs—where they would be working the following year (Table 6.22). Based on this information, we estimate that one-third of the teachers working in special education in single districts during the 2004-05 school year would be working in another job in the fall of 2005. There was little difference between the estimated turnover for novices compared to that for experienced teachers in single districts.

For special education teachers in SSAs, the estimated overall turnover rate was about one-third, however, almost half of the novice teachers were planning to leave their current teaching job.

Table 6.22. Novice and Experienced Special Education Teachers: Plans to Remain in the Job Next Year

Teaching Experience Group	Teachers in Single Districts		Teachers in SSAs	
	Number	Percent	Number	Percent
Total Teachers	**1,522**	**100.0**	**357**	**100.0**
- Teachers planning to remain in the job	1,013	66.6	253	70.9
- Teachers planning to leave the job next year	509	33.4	104	29.1
Novice Teachers: 3 or fewer years teaching	**166**	**10.9**	**22**	**6.2**
- Teachers planning to remain in the job	107	64.5	12	54.5
- Teachers planning to leave the job next year	59	35.5	10	45.5
Experienced Teachers: 4 or more years teaching	**1,272**	**83.6**	**318**	**89.1**
- Teachers planning to remain in the job	857	67.4	231	72.6
- Teachers planning to leave the job next year	415	32.6	87	27.4
Other Teachers: - Experience not reported	**84**	**5.5**	**17**	**4.8**

Source. Special Education Teacher Survey.
Note. Data for this table was extrapolated from the item asking where leavers planned to work next year.

In order to better understand some of the reasons behind the relatively high turnover reported in past years for special education teachers, we asked where teachers who were planning to leave would likely be working the following year (Tables 6.23 and 6.24). In single districts, 21.9 percent of teacher respondents indicated they would be working in a special education position the following year in another district or in a public or private agency or hospital (Table 6.23). However, there were proportionally more novice teachers than experienced teachers planning on these work destinations. About 17.7 percent of single district teachers indicated they would be teaching in an area outside of special education—either in their current district or another district (or local education agency [LEA])—with somewhat less of the novice teacher group planning on this. There were 16.8 percent of single district teachers reporting they would be working in administration—either in their current district or another district. About 10.7 percent of the single district teachers said they would be retired. As expected, none of the novice teachers reported they would be retiring.

To summarize for the single districts, less than one-fourth of those special education teachers planning to leave their job were expected to be working in the special education teaching field one year later. While a significant proportion of respondents will be continuing to teach, they will be working in different schools, districts, or organizations that may have offered better compensation or working conditions. In addition, one-tenth of leavers were planning to retire.

Table 6.23. Special Education Teachers in Single Districts: Destinations of Potential Job Leavers

Destination of Potential Leavers	All Teachers		Novice Teachers		Experienced Teachers	
	Number	Percent	Number	Percent	Number	Percent
Special education teaching position in another local educational agency (LEA)	97	19.1	16	27.1	72	17.3
Special education teaching position in a public or private agency or hospital	14	2.8	0	0.0	13	3.1
Teaching position outside of special education in another LEA	27	5.3	4	6.8	22	5.3
Teaching position outside of special education in my current LEA	63	12.4	3	5.1	53	12.8
Administrative or other non-teaching position in my current LEA	71	14.0	7	11.9	61	14.7
Administrative or other non-teaching position in another LEA	14	2.8	4	6.8	10	2.4
Position in a field outside of education	44	8.7	3	5.1	39	9.4
Returning to school	18	3.6	4	6.8	14	3.4
Attending to home making, child rearing, and/or caring for elderly or ill family members	17	3.4	2	3.4	15	3.6
Retiring	54	10.7	0	0.0	49	11.8
Relocating to another community for family/ spouse/ other reasons	26	5.1	6	10.2	20	4.8
Other	62	12.2	10	16.9	47	11.3
Total	**507**	**100.0**	**59**	**100.0**	**415**	**100.0**

Source. Special Education Teacher Survey.
Note. Novice and experienced teacher totals do not sum to 507 due to missing data regarding teaching experience.

For special education teachers in SSAs who were planning to leave their job, 19.2 percent indicated they would be in a special education teaching position in another district or in a public or private agency or hospital the following year (Table 6.24). A slightly smaller proportion of experienced teachers reported this destination. About one-fourth (23.0 percent) of respondents indicated they would be teaching in an area outside special education, and 13.4 percent reported they would be serving as administrators. About 11.5 percent of respondents reported they would be retiring, with a slightly greater proportion of experienced teachers and none of the novice teachers planning on this.

In comparing teacher respondents from single districts with those from SSAs, it appears that a higher proportion of teachers from the latter group planned to teach in an area outside special education. In addition, a slightly smaller proportion of SSA and SSA participant teachers were planning to work in administrative positions the following year.

Table 6.24. Special Education Teachers in SSAs: Destinations of Potential Job Leavers

Destination of Potential Leavers	All Teachers		Novice Teachers		Experienced Teachers	
	Number	Percent	Number	Percent	Number	Percent
Special education teaching position in another local educational agency (LEA)	15	14.4	2	20.0	9	10.3
Special education position in a public or private agency or hospital	5	4.8	0	0.0	4	4.6
Teaching position outside of special education in another LEA	12	11.5	1	10.0	10	11.5
Teaching position outside of special education in my current LEA	12	11.5	1	10.0	11	12.6
Administrative or other non-teaching position in my current LEA	10	9.6	1	10.0	8	9.2
Administrative or other non-teaching position in another LEA	4	3.8	0	0.0	4	4.6
Position in a field outside of education	6	5.8	0	0.0	6	6.9
Returning to school	3	2.9	1	10.0	2	2.3
Attending to home making, child rearing, and/or caring for elderly or ill family members	4	3.8	1	10.0	3	3.4
Retiring	12	11.5	0	0.0	12	13.8
Relocating to another community for family/ spouse/ other reasons	6	5.8	2	20.0	4	4.6
Other	15	14.4	1	10.0	14	16.1
Total	**104**	**100.0**	**10**	**100.0**	**87**	**100.0**

Source. Special Education Teacher Survey.
Note. Novice and experienced teacher totals do not sum to 104 due to missing data regarding teaching experience.

Summary and Conclusions

Characteristics of Special Education Teachers

About three-quarters of the special education teachers participating in the current study were white or Anglo, and 85 percent were female. A substantial proportion of special education teachers were nearing retirement. If the survey respondents are typical of all special education teachers in Texas public schools, this group of older special education teachers may represent a very large group of teachers who are likely to retire in the near future. If these retirees move to other Texas communities, they may enhance the potential applicant pools for special education personnel in those communities. On the other hand, many school districts will lose valuable staff and will need to develop new ways of dealing with this type of turnover.

Special education teachers are highly educated. More than half of the teacher respondents had completed coursework beyond a bachelor's degree. Almost one-third of the respondents held a master's degree. Two-thirds or more of the respondents had participated in a traditional undergraduate or graduate university teacher preparation program. The most popular alternative certification programs for special education teachers were those offered by education service centers. Less than 1 percent of teacher respondents had not participated in a teacher training program.

About one-third of special education teachers reported they had participated in a teacher mentoring program when they first began teaching. In terms of opportunities for professional growth once a teacher had begun his or her career, slightly more than one-third of respondents reported they had participated in a master teacher, mentor teacher, or other leadership training program designed for teachers.

Nearly all of the special education teacher respondents hold a lifetime teaching Texas teaching certificate, or both lifetime and standard certificates, and are certified in special education. More than 80 percent of teacher respondents indicated they held a Texas teaching certificate for grade levels from early childhood through grade 12. About one-fifth of special education teachers reported they held teaching certifications in other states and countries, in addition to Texas teaching certificates. Among these teachers, the greatest number held teaching certificates from states bordering Texas—Oklahoma, Louisiana, and New Mexico. However, a large number of teachers with teaching certificates from outside Texas held certificates from Illinois or Colorado. These five states may be critical sources of potential applicants for special education teacher positions. Since there were many Texas teachers who reported obtaining certification in these states, it is possible that there are existing avenues that attract certified teachers to Texas from these states. In areas of critical shortage special education teacher positions, special education administrators may wish to consider recruiting from school districts in these five states.

Special education teachers have extensive teaching experience. On average, special education teachers in the current study had more than 14 years of teaching experience. About three-quarters of special education teachers had experience teaching at the elementary level, and more than half had experience teaching at the secondary level. Special education teachers had spent an average of almost 8 years in their current job.

A small proportion of special education teachers had not taught previously; one-tenth or less of the teacher respondents were novice teachers—those with three or fewer years total teaching experience. On the other hand, about one-third of special education teachers in single districts and one-fourth of teachers in SSAs had five or fewer years experience teaching in the field of special education. This group of teachers may benefit from retention strategies—such as peer coaching programs— that take into account their overall experience in teaching, and their need for specific support in the area of special education teaching. Peer coaching programs designed for this group may be effective in retaining these experienced teachers new to special education, as well as novice teachers.

Substantial proportions of special education teachers who provide basic instruction in a core subject at the elementary or secondary level appear to meet the federal guidelines for “highly qualified” teachers. In single districts, 40 percent or more of the special education teachers who indicated they provided basic instruction in a core subject at the elementary level appeared to meet the highly qualified requirements in the areas of English/language arts, math, science, and social studies. This was also true for teacher respondents from SSAs.

In single districts, 40 percent or more of special education teachers indicating they provided basic instruction in a core subject at the secondary level appeared to meet the highly qualified standards in the areas of civics and government, English, history, math, reading/ language arts, and science. More than 40 percent of special education teachers in SSAs who taught core subjects appeared to meet the highly qualified guidelines in civics and government, economics, English, geography, and reading/language arts.

Special Education Assignment

The overwhelming majority of students served by teachers in the current study—57.9 percent—were students whose primary disability was a specific learning disability. The next largest groups of students served were those with behavioral impairments (9.1 percent of students), mental retardation (7.6 percent),

other health impairment including chronic illness or medically fragile condition (7.0 percent). While most special education teachers work with 30 or fewer students, we estimate the average number of students served by a special education teacher in our survey was 25.

Special education teachers were most likely to work in resource classes and self-contained classes. In addition to teaching classes or working directly with students, we estimate that teachers spend almost 60 hours per month on non-instructional tasks associated with their special education position. Some of these tasks include planning instruction, completing paperwork such as IEPs, serving on ARD and school or district committees, and meeting with other teachers.

Special Education Work Environment

In general, the special education teachers responding to the current survey indicated that their school climate is supportive. On average, they agreed that their school environment provided for teacher participation in decision making, principal support for solving instructional and behavioral problems, and special education administrator support at the district level. They also tended to agree that teachers had access to instructional resources and teaching materials, and computer technology to assist with paperwork responsibilities. Lastly, teachers agreed that they had adequate time to work directly with their special education students, and an opportunity to assess their students' growth and progress. On the other hand, special education teachers were ambivalent about whether policies are applied consistently at their school, and they expressed moderate disagreement that they had clerical support to assist with paperwork duties.

Although special education teachers generally reported agreement with the aspects of a positive school climate, their average level of agreement fell closer to the middle of the rating scale. This suggests the possibility that many aspects of the school climate which impact the special education environment have potential to improve, and thereby contribute to increased retention of special education teachers. Overall, teachers' ratings of their work conditions do not reflect a strong school climate in either the administrative or the instructional domain. Without strong administrative and instructional support systems, teachers may find it difficult to be effective in the classroom. This appears to be even more critical for special education teachers who have the added responsibilities of developing instructional plans and monitoring progress for each of their students.

Special education teachers in single districts were much more likely than those in SSAs to report their school or district offered pay incentives. In single districts, almost half of the respondents reported that pay supplements or stipends were available for special education teachers. Somewhat less than one-fourth of the teachers reported their district provided extra pay, reduced class or case loads, or release time for added non-teaching responsibilities. In SSAs, the most common approach to incentives was paying for additional responsibilities, however, only 15 percent of the teachers in SSAs indicated this practice was used in their district.

About one-fourth of the single district respondents indicated their school district provided some form of skill-based or knowledge-based pay. Investigating the utility of knowledge-based pay in public schools may be a particularly fruitful area for future research. This form of reward system is often used for occupations or jobs where performance outcomes are difficult to measure, or where increased expertise can improve work processes integral to the job. Because it is linked to strengthening the skills and knowledge needed to succeed in the job, knowledge-based pay systems may be an effective approach for motivating special education and other teachers to become better at working with their students.

While merit pay is not typically used in public schools, it is interesting to note that 2.3 percent of the teachers in single districts, and 1.1 percent of the teachers in SSAs reported their school or district provided merit pay for special educators who performed at an exemplary level.

Special Education Teacher Turnover

Overall, about two-thirds of special education teachers are satisfied with their job. Novice teachers were somewhat more likely than experienced teachers to report they were dissatisfied with their jobs. About one-third of all special education teachers—typically those with lower job satisfaction—indicated they were planning to leave the job the following year.

School districts may be able to increase retention by focusing on the novice teacher group, and developing support systems that contribute to overall job satisfaction for these teachers. Typically job satisfaction encompasses satisfaction with several key areas of the job including pay, co-workers, opportunities for professional growth, supervision, and the specific responsibilities and tasks associated with their job. Providing support in one or more of these areas will likely increase overall job satisfaction, and will potentially decrease the chances of novice special education teachers leaving the job. Some examples of human resource management programs that might be useful include mentoring novice teachers, providing training to improve supervisor skills, offering incentives to increase knowledge and skills in special education teaching, and decreasing teaching loads for novice teachers so they have more time to plan lessons and to become socialized into the special education profession.

Interestingly, about one-fifth of the teacher survey respondents from single districts indicated that they were neither satisfied nor dissatisfied with their job. This is a relatively large proportion of respondents, and represents a group that perceives few sources of job satisfaction in their current job. Subgroup analysis indicated that special education teachers who were ambivalent about their job were more likely to leave the job than special education teachers in general. Furthermore, they were much more likely to be leaving for administrative positions than all leavers. While it is possible that these teachers were taking administrative roles within special education, the current study did not address this. School districts that can discern what is important to special education teachers in this group and design appropriate human resource management practices to support these teachers, may be able to increase teacher retention. In summary, it is important to consider the teachers who are neutral with regard to job satisfaction, as well as the teachers who are very dissatisfied with their jobs, when developing retention strategies.

Of those teachers planning to leave their job, only 20 percent were planning to teach special education the following year. Novice teachers in single districts were slightly more likely than those in SSAs to be teaching special education in another district or organization. We surmise that novice teachers are attracted to jobs in other districts and organizations where they are offered better compensation or work conditions.

Consistent with the data regarding special education teacher age and years experience, about 12 to 14 percent of experienced teachers planned to retire. About 10 percent of those respondents who indicated they planned to leave their current job were planning to retire. This group can potentially be tapped as a candidate pool for additional special education teachers. Flexible arrangements such as part-time assignments, job sharing, or limited duties outside teaching may be attractive to retirees.

For special education teachers in SSAs, the estimated overall turnover rate was about one-third; however, almost half of the novice teachers were planning to leave their current teaching job. While the number of novice teachers serving in SSAs appears to be small, the human resource management costs of replacing these teachers can be significant. SSAs may find mentoring programs to be a particularly useful tool for

retaining novice teachers. The mentoring relationship may also serve to strengthen experienced teachers' ties to their current job in the SSA.

In summary, there appears to be a large proportion of leavers who are not planning to continue teaching special education—almost three-quarters of those respondents who indicated they planned to leave their current job. It is possible that some of these teachers planned to work in special education administration, and will continue to contribute their expertise in special education through this avenue. However, the loss in classroom teachers in special education is potentially significant. Not only are special education teachers leaving for better compensation or work conditions in other districts and organizations, they appear to be leaving the field of special education. Districts and SSAs need new or expanded retention strategies that can address this phenomenon. Mentoring programs may be useful in initiating novices into the profession, and in providing support and guidance in the development of needed skills. Reducing paperwork or providing assistance in this arena may also be effective in increasing retention in the field. Another promising approach is to strengthen teaching preparation programs by including some realistic previews of the special education teacher's job.

7. Other Special Education Professionals

In addition to our survey of special education teachers, we surveyed a sample of *other special education professionals* such as educational diagnosticians, speech language pathologists, licensed specialists in school psychology, and therapists. Similar to our approach in surveying special education teachers, we did not differentiate between other professionals in positions staffed through an SSA and other professionals in positions funded directly by an SSA participant district. Other special education professionals assigned to a campus were randomly surveyed regardless of the funding source for their position.

Respondents included 683 special education professionals in single districts (16.0 percent response rate), and 123 professionals working for SSAs or for SSA participant districts (19.3 percent response rate). As noted in Section 2 of this report, respondents represented school districts throughout the state and appeared to be very similar to the population of special education professionals in Texas schools. Therefore, we are confident that the results of the current study may be generalized to all special education professionals in Texas public schools.

This section summarizes the results of our survey of other special education professionals relative to their preparation and experience, special education assignment and workload, and perceptions of the work environment. We also report on other special education professionals' intentions to quit or remain in the job during the next year.

Characteristics of Other Special Education Professionals

Position

The results reported in this section of the report describe personnel in special education professional positions including educational diagnostician, speech language pathologist, school psychologist, occupational therapist, and physical therapist positions (Table 7.1). Including both bilingual and English-only personnel, about half of the single district and the SSA respondents indicated that they were certified or licensed speech language pathologists (52.5 percent and 48.8 percent, respectively). About one-third of the respondents served as bilingual or English-only educational diagnosticians (29.4 percent in single districts, 32.5 in SSAs).

In single districts, 8.0 percent of the other professionals were licensed specialists in school psychology. The proportion of personnel in this position in SSAs was much less. Similarly, special education personnel in physical therapist positions represented 2.0 percent of single district respondents, but only 0.9 percent of SSA respondents. This pattern was reversed for other therapist positions. Specifically, 1.5 percent of single district respondents and 2.6 percent of SSA respondents were occupational therapists; 0.2 percent of single respondents and 1.7 percent of SSA respondents were orientation and mobility specialists.

While few of the other special education professionals in the survey reported holding bilingual positions, the proportion was even smaller for SSAs compared to single districts—3.6 percent of single district respondents and 0.9 percent of SSA respondents held a bilingual position. In focus group interviews formed to pilot test questionnaires for the current study, special education administrators briefly discussed the need for bilingual personnel. Interestingly, these administrators noted that despite the need for bilingual professionals, bilingual positions were rarely funded because administrators perceived there were few applicants available.

Table 7.1. Current Position of Other Special Education Professionals

Position	Professionals in Single Districts		Professionals in SSAs	
	Number	Percent	Number	Percent
Educational diagnostician	184	28.3	38	32.5
Educational diagnostician, bilingual	7	1.1	0	0.0
Speech language pathologist, licensed or certified	327	50.2	56	47.9
Speech language pathologist, licensed or certified, bilingual	15	2.3	1	0.9
School psychologist, licensed	51	7.8	2	1.7
School psychologist, licensed, bilingual	1	0.2	0	0.0
Occupational therapist	10	1.5	3	2.6
Physical therapist	13	2.0	1	0.9
Orientation and mobility specialist	1	0.2	2	1.7
Other	42	6.5	14	12.0
Total	**651**	**100.0**	**117**	**100.0**

Source. Other Special Education Professionals Survey.

Demographic Characteristics

More than 90 percent of other special education professionals responding to our survey were women (Table 7.2). About 86 percent of the other professionals in single districts, and about 97 percent in SSAs, were white or Anglo. There were proportionally fewer minority group members working as other special education professionals in SSA districts. These proportions are consistent with the overall composition of other special education professionals in Texas public schools. (See Section 2 of this report.)

Table 7.2. Gender and Ethnicity of Other Special Education Professionals

	Professionals in Single Districts		Professionals in SSAs	
	Number	Percent	Number	Percent
Gender				
Female	614	94.6	109	94.0
Male	35	5.4	7	6.0
Total	**649**	**100.0**	**116**	**100.0**
Ethnicity				
African-American	28	4.3	0	0.0
Hispanic	56	8.7	3	2.6
White/Anglo	552	85.6	112	97.4
Other	9	1.4	0	0.0
Total	**645**	**100.0**	**115**	**100.0**

Source. Other Special Education Professionals Survey.

The average age and age range for other special education professionals in single districts was quite similar to those of personnel in SSAs. Specifically, the average age of special education professionals in single districts was 46.1 years; the youngest was 25 years old and the oldest was 72 years old. The average age of special education professionals in SSAs was 45.7, with a range in age from 26 to 75 years.

In terms of the proportion of other professionals in various age categories, there were two notable differences between personnel in single districts and personnel in SSAs (Table 7.3). In the 46 to 55 years age group, the proportion of personnel was smaller in single districts and larger in SSAs (38.7 percent in single districts, 46.1 percent in SSAs). And in the 56 to 65 years age group, the proportion of personnel was larger in single districts and smaller in SSAs (17.6 percent in single districts, 12.4 percent in SSAs). Thus, it appears that there was a slightly larger cohort of mid-career personnel in the SSAs.

Table 7.3. Age Groups of Other Special Education Professionals

	Professionals in Single Districts		Professionals in SSAs	
Age Groups	Number	Percent	Number	Percent
25 years or younger	3	0.5	0	0.0
26-30 years	65	10.3	5	4.4
31-35 years	66	10.5	19	16.8
36-40 years	59	9.4	14	12.4
41-45 years	72	11.4	8	7.1
46-50 years	96	15.2	23	20.4
51-55 years	148	23.5	29	25.7
56-60 years	85	13.5	13	11.5
61-65 years	26	4.1	1	0.9
66 years or older	11	1.7	1	0.9
Total	**631**	**100.0**	**113**	**100.0**

Source. Other Special Education Professionals Survey.

Professional Preparation

As noted above, the positions reported in this section include non-teaching special education professional positions such as educational diagnostician, speech language pathologist, school psychologist, and occupational therapist. Recent information provided by the State Board for Educator Certification indicates that preparation for these positions typically entails a college degree, and certification or license conferred by the appropriate professional organization within the state. Some special education professional positions also require teaching experience. Educational diagnosticians must have a master's degree or equivalent and a Texas educational certification, which requires two years of teaching experience. Speech language pathologists must complete an appropriate college curriculum and be certified through the State Board of Examiners for Speech-Language Pathology and Audiology. Occupational and physical therapists must be certified through The Executive Council of Physical Therapy and Occupational Therapy Examiners in Texas.

The certification or licensing requirements for these special education professional positions are very specialized. However, we felt it would be useful to investigate the overall educational achievement as an additional measure of the quality of special education personnel in Texas public schools. We also felt it would be informative to investigate the degree to which personnel in these positions have experience as teachers. Since these personnel can work either in schools or in hospitals and similar private organizations, the degree to which they have experience as teachers may serve to enhance their value to public schools. Thus we report education level, teaching preparation and experience, and teaching certifications of other special education professionals, as well as experience in their current positions.

Education. In single districts, 87.8 percent of other special education professionals reported completing at least a master's degree—75.5 percent had achieved a master's degree while 12.3 percent had completed additional graduate coursework beyond one master's degree or a higher level degree (Table 7.4). In SSAs,

the proportion of other special education professionals with a master's or higher level educational achievement was slightly lower (82.4 percent), with 67.5 percent having achieved a master's degree, and 14.9 percent having completed additional graduate coursework or degrees.

Table 7.4. Education Level of Other Special Education Professionals

Education Level	Professionals in Single Districts		Professionals in SSAs	
	Number	Percent	Number	Percent
Doctorate	10	1.5	2	1.8
Working toward a doctorate	24	3.7	1	0.9
Educational Specialist Degree	38	5.9	11	9.6
Master's degree	488	75.5	77	67.5
Working toward a Master's degree	25	3.9	6	5.3
Second Bachelor's degree	2	0.3	0	0.0
Bachelor's degree	51	7.9	14	12.3
Other (typically 2nd Master's degree)	8	1.2	3	2.6
Total	**646**	**100.0**	**114**	**100.0**

Source. Other Special Education Professionals Survey.

Mentoring programs. As is true for careers in teaching, mentoring programs for other special education professional positions can assist new employees as they learn the expectations and work environment of their profession. Mentoring may provide a social support system for new employees, access to work-related resources and information, and coaching to improve or develop needed skills. In single districts, 20.6 percent of other professionals responding to our survey had participated in a mentoring program early in their career (Table 7.5). A somewhat smaller proportion of other professionals in SSAs had participated in such a program (12.7 percent). While there was a broad range in the length of mentoring programs reported, the majority of programs (62.5 percent in single districts) were no more than 40 hours long.

Table 7.5. Other Special Education Professionals: Participation in Mentoring Programs Early in Career

	Professionals in Single Districts		Professionals in SSAs	
	Number	Percent	Number	Percent
Participated in a mentor program				
Total	**135**	**20.6**	**15**	**12.7**
Number of hours in mentor program				
1-5 hours	9	10.8	1	12.5
6-10 hours	8	9.6	1	12.5
10-20 hours	16	19.3	3	37.5
21-30 hours	9	10.8	0	0.0
31-40 hours	10	12.0	0	0.0
41-50 hours	4	4.8	0	0.0
51-100 hours	11	13.3	0	0.0
More than 100 hours	16	19.3	3	37.5
Total	**83**	**100.0**	**8**	**100.0**

Source. Other Special Education Professionals Survey.
Note. For single districts, 135 of 654 respondents participated in a mentoring program; 83 provided data regarding the number of hours spent in the program. For SSAs, 15 of 118 respondents participated in a program; 8 provided data regarding the number of hours spend in the program.

Teacher certification. About 58 percent of single district respondents (385 of 660 respondents) and 62 percent of SSA respondents (80 of 119 respondents) reported holding a lifetime, standard, or both lifetime and standard teaching certificates (Table 7.6). More single district respondents than SSA respondents reported having teaching certificates granted by other states or countries (21.5 percent, and 8.4 percent respectively). Among single district respondents, other special education professionals reported holding teaching certificates in 44 states outside Texas, and in 3 foreign countries. Other professionals in SSAs reported holding teaching certificates from 10 states outside Texas. States that had granted teaching certificates to the largest numbers of other professionals were California, Illinois, Oklahoma, and Louisiana. (A complete listing of out-of-state teaching certificates held by other special education professionals in single districts and SSAs is presented in Appendix E.)

Table 7.6. Teaching Certifications Held by Other Special Education Professionals

	Professionals in Single Districts		Professionals in SSAs	
Teaching Certificate	Number	Percent	Number	Percent
Standard Certificate (issued after 9/1/99)	19	2.9	6	5.0
Lifetime Certificate (issued prior to 9/1/99)	347	52.6	63	52.9
Both Lifetime and Standard Certificates	19	2.9	11	9.2
Probationary Certificate	4	0.6	1	0.8
Temporary Certificate	0	0.0	1	0.8
Temporary Permit (issued by school district)	0	0.0	0	0.0
Emergency Permit (issued by school district)	0	0.0	0	0.0
Certification outside Texas	142	21.5	10	8.4

Source. Other Special Education Professionals Survey.
Note. There were 660 respondents from single districts, and 119 respondents from SSAs. Percentages do not add to 100% as respondents were asked to mark all certifications that were applicable.

In addition to their education and training as educational diagnosticians, speech language pathologists, psychologists, and therapists, more than one-third of the other special education professionals reported holding either a special education teaching certificate for Early Childhood through grade 12, or the supplemental special education certificate which typically accompanies a general education teaching certificate (Table 7.7).

Table 7.7. Texas Special Education Teaching Certifications of Other Special Education Professionals

	Professionals in Single Districts		Professionals in SSAs	
Teaching Certificate	Number	Percent	Number	Percent
Special Education (EC-12)	203	30.8	40	33.6
Special Education - Supplemental[a]	39	5.9	7	5.9
Special Education - Hearing Impaired	12	1.8	3	2.5
Visually Handicapped Endorsement or Delivery System (PK-12)	4	0.6	1	0.8

Source. Other Special Education Professionals Survey.
Note. There were 620 respondents from single districts, and 119 respondents from SSAs.
[a]Attaches to base certificate other than special education.

Professional Experience

We asked other special education professionals how long they had been working in their profession, as well as how many years they had worked in their current position and in a school environment. On average, the special education professionals we surveyed in single districts had been working as educational diagnosticians, speech language pathologists, psychologists, or therapists for 15.2 years, although some had been working in their field for as many as 42 years (Table 7.8). In SSAs, other special education professionals had less overall experience—the average number of years in their field was 13.5, with some professionals having worked as many as 33 years in their field.

On average, survey respondents reported having over a dozen years experience working in their field in a school environment (13.9 years for single district respondents, 12.1 years for SSA respondents), and they reported an average of about five years experience teaching special education (5.4 years for both single and SSA respondents). Single district and SSA respondents differed in their experience teaching general education, with other professionals from SSAs having slightly more experience in this area (1.8 years average for single district respondents, 3.1 years average for SSA respondents). They had spent about the same time in their current job (about 8 years).

Table 7.8. Average Years Professional Experience for Other Special Education Professionals

	Professionals in Single Districts			Professionals in SSAs		
Work Experience	Mean	SD	Range	Mean	SD	Range
Total years in other SpEd professional positions	15.2	9.8	0-42	13.5	9.1	0-33
Years in other SpEd professional positions in schools	13.9	9.7	0-42	12.1	9.0	0-33
Years as SpEd teacher	5.4	8.4	0-37	5.4	8.2	0-36
Years as general education teacher	1.8	4.6	0.37	3.1	6.5	0-44
Years in current job	8.5	7.2	0-38	8.4	6.7	0-31

Source. Other Special Education Professionals Survey.
Note. SD is standard deviation. There were 652 respondents from single districts, and 116 respondents from SSAs.

Experience in the profession. About two-thirds of other special education professionals appear to be in the mid-career stage, having 6 to 25 years *total years experience* in their field (60.8 percent of single district respondents, 65.5 percent of SSA respondents) (Table 7.9). About one-fifth of single district and SSA respondents reported having five or fewer years experience in their field (21.6 percent in single districts, 20.7 percent in SSAs). This is typically a critical period for teachers—a large proportion of teachers leave the profession within the first five years in the field. We anticipate that other special education professionals will not be as likely to change professions as teachers because they have completed more specialized training programs. In addition, some have already changed fields—for example, some educational diagnosticians may have been special education teachers earlier in their careers. On the other hand, 11.8 percent of single district respondents, and 7.8 percent of SSA respondents were novices—they had one to three years experience in their fields. These individuals are new to the profession and new to the organization, and may need a more extensive social support system as they become acclimated to their careers. Among all survey respondents, a considerable number had worked in their profession for more than 25 years—17.6 percent of single district respondents, and 13.7 percent of SSA respondents.

In addition, 84.4 percent of single district respondents, and 88.8 percent of SSA respondents reported working as a *special education professional in a public or private school* for four or more years.

In terms of their *current job*, about one-fourth of other special education professionals had been in their job for three or fewer years (28.4 percent in single districts, 23.3 percent in SSAs). Given the extensive experience in the field for all respondents, these data suggest that there is considerable personnel turnover among other special education professionals, who probably move from one district to another.

Table 7.9. Professional Experience of Other Special Education Professionals

	Professionals in Single Districts		Professionals in SSAs	
Work Experience	Number	Percent	Number	Percent
Total years in Other Special Education Professional positions				
0-3 years	77	11.8	9	7.8
4-5 years	64	9.8	15	12.9
6-10 years	123	18.9	34	29.3
11-15 years	84	12.9	13	11.2
16-20 years	83	12.7	14	12.1
21-25 years	106	16.3	15	12.9
26-30 years	77	11.8	12	10.3
More than 30 years	38	5.8	4	3.4
Years as Other Special Education Professional in a public or private school				
0-3 years	102	15.6	13	11.2
4-5 years	61	9.4	20	17.2
6-10 years	126	19.3	31	26.7
11-15 years	92	14.1	15	12.9
16-20 years	77	11.8	14	12.1
21-25 years	101	15.5	11	9.5
26-30 years	64	9.8	8	6.9
More than 30 years	29	4.4	4	3.4
Years in current Other Special Education Professional position				
0-3 years	185	28.4	27	23.3
4-5 years	118	18.1	26	22.4
6-10 years	159	24.4	29	25.0
11-15 years	91	14.0	17	14.7
16-20 years	48	7.4	9	7.8
21-25 years	28	4.3	5	4.3
26-30 years	15	2.3	2	1.7
More than 30 years	8	1.2	1	0.9

Source. Other Special Education Professionals Survey.
Note. Data for this table were provided by 652 respondents from single districts, and 116 respondents from SSAs.

Teaching experience. About half of the other special education professionals indicated they had *taught special education*—46.1 percent of single district respondents (304 of 660 total respondents), and 51.3 percent of SSA respondents (60 of 119 total respondents) (Table 7.10). Of those who reported having special education teaching experience, about two-thirds had more than five years of teaching experience in this area (68.1 percent of single district respondents, and 62.3 percent of SSA respondents).

A large proportion of the survey respondents also reported having experience *teaching general education classes.* Overall, however, fewer respondents had taught general education than special education. For single districts, 25.5 percent of respondents had taught general education (168 of 660 total respondents),

and in SSAs, 32.8 percent of respondents had taught in this area (39 of 119 total respondents). Among professionals who had taught general education, a greater proportion in SSAs than in single districts had more than five years experience in this area (40.5 percent in single districts, 56.5 percent in SSAs).

Table 7.10. Teaching Experience of Other Special Education Professionals

Teaching Experience	Professionals in Single Districts		Professionals in SSAs	
	Number	Percent	Number	Percent
Years working as a Special Education Teacher				
1-3 years	52	17.1	15	24.6
4-5 years	45	14.8	8	13.1
6-10 years	77	25.3	16	26.2
11-15 years	41	13.5	8	13.1
16-20 years	29	9.5	4	6.6
21-25 years	30	9.9	5	8.2
26-30 years	23	7.6	3	4.9
More than 30 years	7	2.3	2	3.3
Total	**304**	**100.0**	**61**	**100.0**
Years working as a General Education Teacher				
1-3 years	65	38.7	10	25.6
4-5 years	35	20.8	7	17.9
6-10 years	30	17.9	10	25.6
11-15 years	21	12.5	6	15.4
16-20 years	10	6.0	3	7.7
21-25 years	3	1.8	1	2.6
26-30 years	1	0.6	1	2.6
More than 30 years	3	1.8	1	2.6
Total	**168**	**100.0**	**39**	**100.0**

Source. Special Education Teacher Survey.
Note. There were 660 single district respondents, and 119 SSA respondents.

Special Education Assignment

In order to describe the work of other special education professionals in Texas schools, we asked respondents to indicate the age of the students with whom they worked, and the primary disabilities of their students. We asked other special education professionals how many students they served overall, and how many students they worked with in a typical week. We also asked survey respondents to indicate the service arrangements in which they worked, the number of schools and districts in which they worked on a regular basis, and the amount of time they spent on tasks that indirectly supported their work with students. These data are summarized below.

Student Characteristics

The ages of the students served by other special education professionals are grouped into age ranges (see Table 7.11). Similar to special education teachers, the other special education professionals worked with students in a variety of age groups. In single districts, 84.1 percent of the other professionals served students in 9 to 12 years of age, and about three-fourths served students 5 to 8 years old (73.0 percent). About half served students aged 1 to 4 years (58.9 percent), and aged 13 to 16 years (50.9 percent).

The pattern was slightly different for SSAs. The largest categories of students served were the same as for single districts—78.2 percent served 9 to 12 year olds, and 77.3 percent served 5 to 8 year olds. However, in all other age categories, there were proportionally more SSA respondents than single district respondents serving the age group. In fact, the proportion of SSA respondents serving students 17 to 20 years old was twice as large as the proportion of single district respondents serving this group (53.8 percent of SSA respondents, and 27.0 percent of single district respondents). And 26.1 percent of SSA respondents compared to 15.0 percent of single district respondents served students 21 years or older. Thus, it appears that personnel in SSAs were more likely to serve students in a wider variety of age groups, and were more likely to work with students who were older.

Table 7.11. Ages of Special Education Students Served by Other Special Education Professionals

	Professionals in Single Districts		Professionals in SSAs	
Age Group of Students Served	Number	Percent	Number	Percent
1-4 years	389	58.9	76	63.9
5-8 years	482	73.0	92	77.3
9-12 years	555	84.1	93	78.2
13-16 years	336	50.9	89	74.8
17-20 years	178	27.0	64	53.8
21 years or older	99	15.0	31	26.1
Total	**660**	--	**119**	--

Source. Other Special Education Professionals Survey.
Note. Percentages total more than 100% because some respondents served students in more than one age group.

In addition to describing the ages of their special education students, other special education professionals reported the primary disabilities of the students with whom they worked. In order to avoid counting students who may have been listed under more than one primary disability, we analyzed data from respondents who (a) provided disability data for their students, and (b) reported the total number of students separately from the number of students by disability. We were able to include data from 498 of the 660 single district respondents, and 82 of the 119 SSA respondents.

More than one-third of the students served had a specific learning disability (36.0 percent in single districts, 42.8 percent in SSAs) (Table 7.12). About one-fourth of the students served had a speech or language impairment (24.4 percent of single district and 22.5 percent of SSA respondents). Combined, these two groups of students comprised more than half of the total students served by other special education professionals.

The groups with the next highest numbers of students served were students with other health impairments (or who were chronically ill or medically fragile), students with emotional disturbances, and students with mental retardation. In single districts, other special education professionals also served a notable proportion of students with autism. In SSAs, other professionals worked with proportionally more students with auditory impairments. While there were relatively large numbers of students in these disability categories, the percent of students in each category ranged from only 4 percent to 9 percent of all special education students served.

Table 7.12. Disabilities of Special Education Students Served by Other Special Education Professionals

Primary Disability of Student	Professionals in Single Districts		Professionals in SSAs	
	Number of Students Served	% of All Students Served	Number of Students Served	% of All Students Served
Specific learning disability	12,672	36.0	2,593	42.8
Emotional disturbance (or behavioral impairment)	2,286	6.5	332	5.5
Mental retardation (cognitive or intellectual impairment)	2,024	5.7	366	6.0
Other health impairment (or chronically ill or medically fragile)	2,947	8.4	520	8.6
Multiple disabilities (combination which severely impairs performance)	1,352	3.8	160	2.6
Autism (or pervasive developmental disorder)	1,946	5.5	176	2.9
Speech or language impairment	8,574	24.4	1,362	22.5
Developmental delay or preschool disabled (included early childhood)	1,615	4.6	155	2.6
Auditory impairment (or deafness)	824	2.3	263	4.3
Orthopedic impairment	395	1.1	50	0.8
Visual impairment (or blindness)	230	0.7	59	1.0
Traumatic brain injury	217	0.6	23	0.4
Deaf-blind	23	0.1	5	0.0
Other disability not listed above (please describe)	100	0.3	1	0.0
Total Special Education Students Served	**35,205**	**100.0**	**6,065**	**100.0**

Source. Other Special Education Professionals Survey.
Note. For single districts, data regarding students served was provided by 498 respondents. For SSAs, data regarding students served was provided by 82 respondents.

In order to assess the overall workload of other special education professionals, we asked respondents to report the number of students with whom they worked in a typical week. Results indicated that 85.7 percent of single district respondents and 89.4 percent of SSA respondents served 60 or fewer students during a typical week (Table 7.13). The average number of students served per week was 37 in single districts and 36 in SSAs. However, from an inspection of the grouped data, it is likely that most professionals served either 20 or fewer students, or 40 to 60 students.

Table 7.13. Number of Students Served by Other Special Education Professionals in a Typical Week

Number of Students Served	Professionals in Single Districts		Professionals in SSAs	
	Number	Percent	Number	Percent
1-10 students	136	22.7	22	20.8
11-20 students	79	13.2	18	17.0
21-30 students	60	10.0	10	9.4
31-40 students	56	9.4	7	6.6
41-50 students	91	15.2	17	16.0
51-60 students	91	15.2	15	14.2
61-70 students	51	8.5	13	12.3
71-80 students	17	2.8	1	0.9
81-90 students	7	1.2	2	1.9
91-100 students	4	0.7	1	0.9
More than 100 students	6	1.0	0	0.0
Total	**598**	**100.0**	**106**	**100.0**
Average number of special education students provided with direct services in a typical week	37.1	--	36.0	--

Source. Other Special Education Professionals Survey.
Note. For single districts, data regarding students served in a typical week were provided by 598 respondents; these respondents served 22,170 students. For SSAs, data regarding students were provided by 106 respondents; these respondents served 3,815 students.

Service Arrangements and Workload

Other special education professionals reported the proportion of their time spent in each of the various types of service settings available for serving special education students. We computed the average percentage of time other professionals spent in each of the various arrangements. Survey respondents in single districts spent about half of their time (49.9 percent) in an office setting when providing direct services to students, and about one-third of their time (32.9 percent) in the special education classroom (Table 7.14). Other professionals in SSAs spent slightly less time in office settings (40.0 percent) and slightly more in special education classrooms (36.9 percent). In both single districts and SSAs, a number of respondents reported that they spent time in other settings. When respondents described other settings used in providing direct services to students, they often reported that they used special education therapy rooms or speech therapy rooms.

Table 7.14. Other Special Education Professionals: Average Percent of Time In Service Arrangement

Service Arrangement	Professionals in Single Districts	Professionals in SSAs
Office	49.9	40.0
Special education classroom	32.9	36.9
Non-special education setting (including in-class support/ inclusion and co-teaching)	5.6	4.5
Home-based settings	0.7	0.3
Community-based settings	0.8	1.3
Other	10.0	17.0

Source. Other Special Education Professionals Survey.
Note. There were 595 respondents from single districts, and 108 respondents from SSAs, who provided data for this table. Because the percentages were averaged across respondents, numbers do not sum to 100%.

In addition to reporting the proportion of time they spent in particular service arrangements, other special education professionals indicated the number of schools in which they worked with students, and the number of districts they served. The data indicate that almost half (45.9 percent) of the other professionals in single districts served only one school, and slightly more than one-fourth (27.9 percent) served two schools (Table 7.15). Almost all of the single district respondents (97.8 percent) reported that they served students in only one school district.

Table 7.15. Schools and Districts Served by Other Special Education Professionals

	Professionals in Single Districts		Professionals in SSAs	
	Number	Percent	Number	Percent
Number of schools in which services were provided to students				
1 school	291	45.9	22	19.3
2 schools	177	27.9	31	27.2
3 schools	73	11.5	24	21.1
4 or more schools	92	14.5	37	32.5
Average	**2.4**	--	**3.8**	--
Number of districts in which services were provided to students				
1 district	621	97.8	60	52.6
2 districts	3	0.5	35	30.7
3 districts	3	0.5	6	5.3
4 or more districts	3	0.5	13	11.4
Average	**1.0**	--	**2.0**	--

Source. Other Special Education Professionals Survey.
Note. There were 635 single district respondents, and 114 SSA respondents, who provided data for this table.

As we anticipated, other professionals in SSAs were more likely to serve students in several schools and more than one school district. Slightly less than one-fifth (19.3 percent) of SSA respondents served students at only one school, and slightly more than one-fourth (27.2 percent) served two schools. One-third of the other professionals (32.5 percent) served students at 4 or more schools. Slightly more than

half of the SSA respondents (52.6 percent) reported that they served students in only one district; however, 11.4 percent indicated that they worked with students in 4 or more school districts.

We asked other special education professionals to report the approximate number of hours they spent each month on various tasks other than providing direct services to special education students. We computed the average number of hours spent on these other tasks. On average, other professionals in single districts spent 42.1 hours each month on completing required paperwork and reports, 23.8 hours serving on ARD committees, and 17.2 hours on planning services for students (Table 7.16). Other professionals in SSAs spend a similar amount of time on these tasks—36.9 hours per month on paperwork, 17.9 hours serving on ARD committees, and 18.4 hours planning for student services.

Table 7.16. Monthly Indirect Student Services Workload of Other Special Education Professionals

	Professionals in Single Districts		Professionals in SSAs	
Indirect Student Services/Tasks	Average Hours Per Month	Average % of Indirect Services Hours	Average Hours Per Month	Average % of Indirect Services Hours
Planning for student services	17.2	18.1	18.4	21.5
Completing paperwork related to serving students with disabilities (including IEP development)	42.1	38.3	36.9	39.0
Serving on ARD committees	23.8	22.6	17.9	18.3
Meeting with special education teachers on lesson planning, curriculum development, guidance and counseling, etc.	6.7	6.7	6.5	6.9
Meeting with general education teachers on lesson planning, curriculum development, guidance and counseling, etc.	4.3	4.2	4.2	4.4
Serving on school or district committees for curriculum design, discipline policy development, selection of teaching materials, and related instructional issues	2.3	2.6	1.8	2.4
Attending special education department meetings	4.0	5.1	3.1	4.6
Maintaining contacts with community resources that support special education	1.4	1.3	1.4	1.7
Providing in-service or other presentations on special education topics for the general education faculty	1.1	1.2	1.1	1.2
Estimate of Total Time Spent on Other Tasks	**103.0**	**--**	**91.1**	**--**

Source. Other Special Education Professionals Survey.
Note. Data were provided by 650 single district respondents, and 116 SSA respondents. Average percent of indirect services hours is the number of hours spent on each task divided by the total hours spent on tasks other than providing direct services to students, averaged across all respondents.

Special Education Work Environment

Administrative and Instructional Support

The student service arrangements and tasks reported above aptly describe the work of educational diagnosticians, speech language pathologists, psychologists, and therapists. In order to understand the response of these professionals to their work, it is also important to assess the work conditions that characterize the special education environments in which they work. While there is an emergent literature that addresses this relative to other special education professionals (Blood, et al., 2002; Pezzei, 1991), we found the literature describing school climate for special education teachers to be particularly useful in identifying the key work conditions for other professionals (e.g., Billingsley, 1993, 2004; Brownell & Smith, 1993; Gersten, et al., 2001; Stempien & Loeb, 2002). We asked other professionals in our survey to respond to several questionnaire items describing the school climate at their campus or district. Each item was rated on a 6-point agreement scale (1=*strongly disagree*, 2=*disagree*, 3=*disagree somewhat*, 4=agree *somewhat*, 5=*agree*, 6=*strongly agree*). Table 7.16 reports the average ratings for items relating to administrative supervision, resources needed for work, and opportunities for working with students.

Table 7.17. Other Special Education Professionals: Mean Ratings of Work Conditions

Work Condition	Professionals in Single Districts	Professionals in SSAs
Supervision		
My special education supervisor at the district level supports me.	4.7	5.0
School administrators work with me to solve instructional and behavioral problems.	4.4	4.6
My principal provides opportunities for special education professionals to be involved in decision making at my school.	4.2	4.3
Policies are applied consistently at my schools.	3.9	4.0
Resources		
I have access to the resources and materials I need for my work with special education students.	4.7	4.8
I have access to reliable computer technology to assist with my special education paperwork responsibilities.	4.6	4.8
I have clerical or other staff support to assist with my paperwork responsibilities in special education.	2.6	2.9
Working with Students		
I have ample opportunity to assess the growth and progress of the special education students with whom I work.	4.2	4.5
I am able to spend adequate time working directly with my students who have disabilities.	3.5	3.8

Source. Other Special Education Professionals Survey.
Note. Mean rating (level of agreement) was based on a 6-point scale where 1=*strongly disagree*, 2=*disagree*, 3=*disagree somewhat*, 4=*agree somewhat*, 5=*agree*, 6=*strongly agree*. For single districts, the number of respondents for each item ranged from 642 to 650. For SSAs, the number of respondents for each item ranged from 116 to 118.

Supervision. Other special education professionals agreed that their district special education administrators support them. They agreed somewhat that their principals provide opportunities for them to be involved in decision making, and that school administrators work with them to resolve instructional

and behavioral problems. Although they also agreed somewhat that polices are applied consistently at their schools, the mean rating for this was lower than the other supervision-related work conditions.

Resources. Relative to resources, special education professionals agreed that they had access to the resources and materials needed for their work with students, and to reliable computer technology to assist with paperwork responsibilities. In contrast, special education professionals disagreed somewhat with the statement that they had clerical or other staff support to assist with paperwork.

Working directly with students. Other special education professionals agreed somewhat that they had adequate opportunities to assess the growth and progress of their students. However, they neither agreed nor disagreed with the statement that they had adequate time to work directly with their special education students (rating of 3.5 on the 6-point scale). This is consistent with the indirect services work load described in Table 7.16 for other professionals.

Human Resources Policies

In addition to administrative policies and practices within schools, there are district human resource policies that contribute to the school work environment for other special education professionals. A number of public school districts and campuses in Texas provide financial or other rewards that serve to attract, retain, or motivate teachers. Some schools extend these same reward systems to other special education professionals. Examples of existing reward systems include compensation such as extra pay for taking on additional responsibilities, bonuses for overall school performance on statewide student assessments, and stipends for assignment to special education as an area of teacher or other professional shortages.

In our survey we asked other special education professionals to indicate whether or not their school utilized each of six different compensation practices. In single districts, about half of the respondents reported that their school or district provided pay supplements or stipends for special education professionals (Table 7.18). About one-fourth of the respondents indicated that their school or district provided pay incentives to encourage special education professionals to complete additional state certifications, advanced degrees or college coursework, and professional development activities. About one-fourth also indicated that special education professionals who took on responsibilities outside their assignment were paid for the extra work. About one-tenth of the respondents indicated their school provided reduced case loads or release time for extra responsibilities.

It is interesting to note that 7.6 percent of single district respondents participated in bonus plans linked to school performance, and 2.0 percent participated in merit pay plans in which they could receive additional pay for exemplary individual performance.

Table 7.18. Other Special Education Professionals: Compensation-Related Practices Used in Districts

Compensation Practice	Professionals in Single Districts		Professionals in SSAs	
	Number	Percent	Number	Percent
Pay supplements and/or stipends	331	51.5	43	36.8
Pay for additional work (serving on committees, developing new curricula, being a master teacher or mentor, etc.)	138	21.4	27	22.9
Pay incentives for increased knowledge in the field (pass additional state certification tests, college courses, advanced degrees, and/or professional development relating to special education)	165	25.6	34	29.1
Reduced class or case loads or release time to compensate for the responsibilities outside direct services to students	62	9.6	22	18.8
Bonus when the school meets certain performance criteria	49	7.6	6	5.1
Merit pay for special educators that do an exemplary job	13	2.0	1	0.8

Source. Other Special Education Professionals Survey.
Note. For single districts, the number of respondents for each questionnaire item ranged from 643 to 648. For SSAs, the number of respondents ranged from 117 to 118. Numbers and percentages represent respondents who indicated their district offered the compensation described; the remaining respondents reported their district did not offer the compensation, or they reported that they did not know if the compensation was offered.

While the most popular incentive plan for the SSAs was the provision of pay supplements and stipends for special education professionals, the proportion of respondents who indicated their school provided this was smaller than in single districts (36.8 percent of SSA respondents, 51.5 percent of single district respondents). The proportion reporting that knowledge-based pay was offered was similar to that of single districts (29.1 percent in SSAs, 25.6 percent in single districts), as was the proportion indicating they were paid for additional responsibilities (22.9 percent in SSAs, 21.4 percent in single districts). However, it was twice as common for SSAs to use reduced case loads or release time to compensate special education professionals for taking on additional responsibilities (18.8 percent in SSAs, 9.6 percent in single districts). School-wide incentive bonus plans were about as popular in SSAs as in single districts (5.1 percent in SSAs, 7.6 percent in single districts). Merit pay was less likely to be offered in SSAs compared to single districts (0.8 percent in SSAs, 2.0 percent in single districts).

Perceptions of the Job and Retention

The research investigating employee attitudes indicates that employee job satisfaction is a strong predictor of intention to quit or remain in the job (Hom, et al., 1994). Since human behavior is preceded by intentions, we predict that special education personnel who are dissatisfied with their job are likely to quit the job. Similar to the survey of special education teachers, we asked other special education professionals to indicate the degree to which they agreed with the following question: “All things considered, I am satisfied with my current job” (Rusbult & Farrell, 1983). Respondents used a 5-point rating scale in which high scores represent high agreement with the statement, and a high degree of job satisfaction (1= *strongly disagree*, 2=*disagree*, 3=*neutral*, 4=*agree*, 5=*strongly agree)*.

About two-thirds of other special education professionals in single districts (66.4 percent) reported agreement or strong agreement with the question. Thus, the majority of these other professionals were satisfied with their jobs (Table 7.19).

Table 7.19. Overall Job Satisfaction of Other Special Education Professionals

Job Satisfaction Rating Level	Percent of All Professionals	Percent of Novice Professionals	Percent of Experienced Professionals
Single Districts			
Strongly disagree	4.5	0.0	5.0
Disagree	10.2	11.4	10.1
Neutral	18.9	15.2	19.5
Agree	55.5	68.4	53.6
Strongly agree	10.9	5.1	11.9
Average Rating	**3.6**	**3.7**	**3.6**
SSAs			
Strongly disagree	1.7	0.0	1.9
Disagree	8.4	22.2	7.5
Neutral	12.6	11.1	13.1
Agree	63.0	66.7	64.5
Strongly agree	14.3	0.0	13.1
Average Rating	**3.8**	**3.4**	**3.8**

Source. Other Special Education Professionals Survey.
Note. Novices comprise professionals who indicated they worked as special education professional other than a teacher in a public or private school for less than 4 years; experienced are those other special education professionals who indicated they had worked in their profession for 4 or more years. Overall Job Satisfaction was measured with the statement, "All things considered, I am satisfied with my current job" (adapted from Rusbult, & Farrell, 1983). Ratings were based on a 5-point scale where 1= *strongly disagree*, 2=*disagree*, 3=*neutral*, 4=*agree*, 5=*strongly agree*. For single districts there were 650 other professionals, including 79 novice 565 experienced. For SSAs there were 119 other professionals, including 9 novice and 107 experienced. Numbers do not sum to the total reported in the "all professionals" category due to missing data.

On the other hand, about five percent of the other professionals in single districts reported strong disagreement with the satisfaction question. These individuals were dissatisfied with their jobs, and thus the most likely to quit. Differences between novice and experienced teachers were observed for this level of satisfaction rating—5.0 percent of experienced professionals and zero percent of novices strongly disagreed with the item. Thus, it appears more likely that experienced special education professionals—speech language pathologists, educational diagnosticians, psychologists, and therapists—will leave their jobs than will other professionals with less than four years experience. These results are contrary to the findings for special education teachers in the current study. In particular, a greater proportion of novice teachers compared to experienced teachers appeared to be dissatisfied and thus more likely to quit.

About one-fifth of other special education professionals in single districts (18.9 percent) were neutral about their job satisfaction. This is a large proportion of the respondents, and it represents individuals who were ambivalent about their jobs, and possibly unsure about whether or not to remain in the job. We conducted a subgroup analysis for these 123 single district respondents. Results indicated that professionals who reported a neutral attitude toward their job appeared to be similar to all single district respondents relative to demographic characteristics, education level, and job title. The professionals with

neutral job satisfaction were similar to all respondents in their experience in the profession, and their teaching experience. Interestingly, professionals who felt neutral about the job had been in the job for slightly fewer years than all professionals—an average of 7.8 years for neutral professionals, and an average of 8.5 years for all respondents. Although the average number of total students served by professionals who felt neutral about the job was larger than for all professionals—82.9 students for neutral professionals, and 70.7 for all respondents, the average number of students they worked with on a weekly basis was about the same—35 students for neutral professionals, and 37 students for all respondents.

The primary area in which professionals who were neither satisfied nor dissatisfied with their jobs differed from all special education professionals was in plans for leaving the current job. For professionals with a neutral job attitude, 37.4 percent planned to leave their jobs (46 leavers out of 123 respondents with neutral job attitude). For all single district special education professionals, 26.5 percent planned to leave their jobs (175 leavers out of 660 total respondents). Thus, it appears that other special education professionals who are ambivalent about their jobs are more likely to leave than other professionals in general. In addition, it is more likely that these professionals will take jobs in agencies, hospitals, and other organizations outside of education, compared to all professionals. Specifically, 39.2 percent of professionals who felt neutral about their jobs indicated they planned to take a position in a public or private agency or hospital, or in a field outside education. For all respondents, 26.3 percent indicated they planned to take a position in a public or private agency or hospital (13.7 percent), or in a field outside education (12.6 percent) (Table 7.21). It is possible that when special education professionals are neither satisfied nor dissatisfied with their jobs, they are more likely to be attracted to positions in other organizations that may offer better compensation or other job benefits.

Overall, other special education professionals in SSAs appeared to be more satisfied with their jobs than professionals in single districts. About three-quarters of professionals in SSAs (77.3 percent) reported they agreed or strongly agreed with the statement that they were satisfied with their current jobs. However, a somewhat smaller proportion of novices was satisfied compared to experienced professionals (66.7 percent of novices, 77.6 percent of experienced).

The proportion of other professionals in SSAs who were dissatisfied with their jobs was smaller than for those in single districts (1.7 percent in SSAs, 4.5 percent in single districts); however, the pattern for novices and experienced was the same—there were no novices reporting strong disagreement with the job satisfaction statement, but 1.9 percent of experienced other professionals reporting strong disagreement.

There were relatively fewer other professionals in SSAs compared to single districts who reported being neutral about their job satisfaction (12.6 percent in SSAs, 18.9 percent in single districts).

In terms of the mean rating of job satisfaction for other special education professionals, respondents in SSAs were slightly more satisfied with their job than those in single districts (mean ratings of 3.8 in SSAs, 3.6 in single districts). Experienced other special education professionals in SSAs reported higher mean satisfaction than novices (mean rating of 3.8 for experienced, 3.4 for novices). However, this pattern was reversed in single districts—novices reported a slightly higher mean rating than experienced other professionals (mean rating of 3.6 for experienced, 3.7 for novices).

Intention to Quit or Remain in the Job

As described in a previous section of this report, we were interested in deriving an estimate of the turnover for special education personnel. We also wished to identify the types of organizations that were successful in recruiting special education personnel away from their current jobs. To this end, we asked other special education professionals—those who were planning to leave their jobs—where they would be working the following year. Based on this information we estimated that about one-fourth of the professionals in single districts and in SSAs during the 2004-05 school year would be working in another job in the fall of 2005 (Table 7.20). Novices were slightly more likely to leave than experienced professionals. Specifically, 30.0 percent of novices in single districts and 33.3 percent of novices in SSAs were planning to leave their job. And 25.5 percent of experienced professionals in single districts and 24.3 percent in SSAs were planning to leave.

Table 7.20. Novice and Experienced Other Special Education Professionals: Plans to Quit or Remain in the Job Next Year

Professional Experience Group	Professionals in Single Districts		Professionals in SSAs	
	Number	Percent	Number	Percent
Total Other Professionals	**660**	**100.0**	**119**	**100.0**
- Planning to remain in the job	485	73.5	90	75.6
- Planning to leave the job next year	175	26.5	29	24.4
Novice Other Professionals: 3 or fewer years experience	**80**	**12.1**	**9**	**7.6**
- Planning to remain in the job	56	70.0	6	66.7
- Planning to leave the job next year	24	30.0	3	33.3
Experienced Other Professionals: 4 or more years	**572**	**86.7**	**107**	**89.9**
- Planning to remain in the job	426	74.5	81	75.7
- Planning to leave the job next year	146	25.5	26	24.3
Other Professionals: - Experience not reported	**8**	**1.2**	**3**	**2.5**

Source. Other Special Education Professionals Survey.
Note. Data for this table was extrapolated from the item asking where leavers planned to work next year.

In order to better understand why other special education professionals planned to leave their jobs, we asked where other professionals who were planning to leave would likely be working the following year. In single districts, the most likely plan for respondents was to retire (Table 7.21). In fact, 18.9 percent of other professionals reported they would be retiring the next year. Overall, there were four additional destinations that represented key reasons for leaving—working in a special education position in a public or private agency or hospital, working in a field outside education, working in an administrative position, working in a special education position in another district. However, as anticipated, the relative frequency of these destinations differed for novice and experienced personnel.

Table 7.21. Other Special Education Professionals in Single Districts: Destinations of Potential Job Leavers

	All Professionals		Novices		Experienced	
Destination of Potential Leavers	Number	Percent	Number	Percent	Number	Percent
Special education position in another local educational agency (LEA)	20	11.4	4	16.7	14	9.6
Special education position in a public or private agency or hospital	24	13.7	6	25.0	18	12.3
Administrative or other non-teaching position in my current LEA	21	12.0	1	4.2	19	13.0
Administrative or other non-teaching position in another LEA	5	2.9	0	0.0	5	3.4
Position in a field outside of education	22	12.6	2	8.3	19	13.0
Returning to school	5	2.9	3	12.5	2	1.4
Attending to home making, child rearing, and/or caring for elderly or ill family members	6	3.4	0	0.0	6	4.1
Retiring	33	18.9	4	16.7	29	19.9
Relocating to another community for family/ spouse/ other reasons	9	5.1	0	0.0	8	5.5
Other	30	17.1	4	16.7	26	17.8
Total	**175**	**100.0**	**24**	**100.0**	**146**	**100.0**

Source. Other Special Education Professionals Survey.
Note. Novice and experienced numbers do not sum to total for "all" professionals due to missing data.

There were 24 novices in single districts who were planning to leave their jobs. While this number is relatively small, it does provide some indication of the destinations attracting novice personnel. For example, 25.0 percent of the novices planned to work in an agency or hospital, and 16.7 percent planned to work in another district. Interestingly, 16.7 percent reported they planned to retire. It is possible that these individuals had been teachers previously, and changed careers when they were close to retirement age. Several novices planned to return to school (12.5 percent). Respondent comments indicated that some novices planned to pursue doctorates in their field.

For experienced other professionals in single districts, 19.9 percent were planning to retire. This is not surprising given the ages of some of the respondents. There were 13.0 percent who were planning to work in a position outside education. In addition, 13.0 percent planned to take administrative positions in their district.

We expected that a number of other professionals would be likely to seek administrative positions as they progressed in their career. Given the large number of other professionals with extensive experience in the field, it is not surprising that many respondents in the current study were planning to leave for an administrative position.

Lastly, 12.3 percent of experienced leavers in single districts were planning to work in a special education position in an agency or hospital. These leavers may be attracted by better pay or different work conditions in organizations outside education.

There were 26 experienced other special education professionals in SSAs who indicated they were leaving their job (Table 7.22). These individuals planned to take a position in a field outside education

(19.2 percent), take a position in another district (15.4 percent), take an administrative position (11.5 percent), or retire (11.5 percent). There were too few novice leavers to infer trends for this group.

This pattern of destinations for experienced leavers in SSAs differs from that of experienced leavers in single districts in two ways. Specifically, experienced leavers in SSAs are more likely than those in single districts to take a position in another district. In addition, experienced leavers in SSAs are less likely than those in single districts to take a position in an agency or hospital. These destinations are reasonable given the characteristics of SSAs—they are typically located in rural communities, and encompass several school districts. There are fewer agencies and hospitals located conveniently to personnel in the SSAs and thus fewer job opportunities. On the other hand, these personnel may move to a different district participating in the SSA, but within driving distance, or may move to another community.

Table 7.22. Other Special Education Professionals in SSAs: Destinations of Potential Job Leavers

	All Professionals		Novices		Experienced	
Destination of Potential Leavers	Number	Percent	Number	Percent	Number	Percent
Special education position in another local educational agency (LEA)	5	17.2	1	33.3	4	15.4
Special education position in a public or private agency or hospital	0	0.0	0	0.0	0	0.0
Administrative or other non-teaching position in my current LEA	3	10.3	0	0.0	3	11.5
Administrative or other non-teaching position in another LEA	0	0.0	0	0.0	0	0.0
Position in a field outside education	6	20.7	1	33.3	5	19.2
Returning to school	0	0.0	0	0.0	0	0.0
Attending to home making, child rearing, and/or caring for elderly or ill family members	2	6.9	0	0.0	2	7.7
Retiring	3	10.3	0	0.0	3	11.5
Relocating to another community for family/ spouse/ other reasons	2	6.9	0	0.0	2	7.7
Other	8	27.6	1	33.3	7	26.9
Total	**29**	**100.0**	**3**	**100.0**	**26**	**100.0**

Source. Other Special Education Professionals Survey.
Note. Novice and experienced numbers do not sum to "all" professionals due to missing data.

Summary and Conclusions

We surveyed 4,271 other special education professionals in single districts, and 636 in SSAs. Survey respondents included 683 professionals in single districts (16.0 percent response rate), and 123 in SSAs (19.3 percent response rate). Respondents appeared to be representative of personnel in other special education professions in Texas public schools, and thus we believe the results of the current study may be generalized to other special education professionals throughout Texas schools.

Characteristics of Other Special Education Professionals

Other special education professionals are primarily female, and white or Anglo. In comparing single districts and SSAs, there was a slightly larger cohort of personnel near retirement age in single districts, and a slightly larger cohort of mid-career personnel in SSAs.

The majority of other professionals were working in speech language pathologist positions. The next largest group was comprised of educational diagnosticians. About one-tenth of the other professionals were licensed specialists in school psychology, and the remaining other special education personnel held occupational therapist and more specialized positions.

Less than 4 percent of the other special education personnel served in bilingual positions. This seems very small relative to the large proportion of Hispanic students in school districts throughout the state. As noted in an earlier section of this report, bilingual speech language pathologist and educational diagnostician positions are emerging as critical shortage staffing areas for the future. In SSAs, there were proportionally fewer licensed specialists in school psychology, and only about one-fourth as many bilingual professionals as in single districts. Thus critical shortages in these areas may be more imminent for SSAs than for single districts.

Other special education personnel are highly educated and experienced. Concomitant with licensing and certification requirements for other special education professional positions, three-quarters of single district personnel and two-thirds of SSA personnel had completed a master's degree.

Other special education professionals have many years experience in their field. On average, other special education professionals had about 15 years experience in their professions. However, about two-thirds had between 6 and 25 years of work experience as other special education professionals. There was a small proportion of novices—those with three or fewer years experience in their fields. This included about 12 percent of other special education professionals in single districts, and about 8 percent in SSAs.

Other special education personnel have a great deal of expertise garnered from the classroom. More than half of other special education professionals held a lifetime or standard Texas teaching certificate in addition to their other professional license or certification. And about one-third held a special education teaching certificate. About half of other professionals had taught special education; on average, these personnel had taught about 5 years. About one-fourth of single district personnel, and one-third of SSA personnel, reported they had taught general education; they had an average of 2 to 3 years teaching experience in this area. In combination with their expertise in speech language pathology, educational diagnostics, psychology, or various therapeutic approaches, this teaching background enhances the qualifications of other special education professionals and provides other special education professionals with an understanding of the educational environment, and may facilitate the process of socializing other professionals into school settings when they begin their career as other special education professionals.

Special Education Assignment

Other special education professionals serve students in several different age groups. Three-quarters or more worked with students 5 to 8 years old, and students 9 to 12 years old. In SSAs, about three-quarters of other professionals worked with these age groups and also with students 13 to 16 years old.

More than one-third of special education students served had a specific learning disability as their primary disability, and about one-fourth had a speech or language impairment. From the data provided by survey respondents, it appears that half of the other special education professionals—those who are speech language pathologists, are working with one-fourth of the students—those with impairments in this area. Future studies of other special education professionals may be strengthened by taking this into account in computing workload estimates.

On average, other special education professionals worked with 36 to 37 special education students each week. However, it was more likely that other professionals would work with up to 20 students, or with 40

to 60 students in a typical week. Professionals in SSAs were more likely to work with students in a wider variety of age groups and more likely to work with older students.

Many survey respondents indicated they spend measurable time traveling to provide direct services to students or to participate in ARD or other meetings. Specifically, more than half of other professionals in single districts, and more than three-fourths in SSAs, traveled to more than one school or campus for various activities associated with their jobs. In describing the work of other professionals in SSAs, future studies should include travel as a part of the non-direct service responsibilities.

Almost all other special education professionals in single districts provided services to students in only one school district. As expected, other special education professionals in SSAs served students in multiple districts. Almost half of the 114 other special education professionals responding from SSAs provided services in two or more different school districts, and more than 10 percent served special education students in four or more districts. These respondents may have different views of their work environment compared to respondents who serve students in only one district. This may be an interesting area for future research.

Other special education professionals spent considerable time on indirect student services and tasks supporting their work with students. The greatest portion of time other than providing direct services to students was spent on completing required paperwork, including Individualized Education Programs (IEPs). This consumed about 40 percent of other professionals' time on other tasks. The next most time-consuming other tasks were serving on ARD committees, and planning for student services.

The data describing the tasks and time allocations for indirect student services reveal that other special education professionals devote the equivalent (in hours) of more than one work week each month to completing and maintaining special education paperwork, including developing IEPs. We estimate that other special education professionals in single districts spent an average of 103.0 hours per month on tasks other than providing direct services to special education students. We estimate that other professionals in SSAs spent an average of 91.1 hours on these indirect student services. If we assume a 40-hour work week for four weeks each month, then special education professionals spent more than half of their time on tasks such as completing paperwork, serving on ARD committees, planning for student services, and meeting with special education teachers and general education teachers. Therefore, it appears that less than half of their work hours each month are available to spend on providing direct services to special education students.

If we consider the data reported above indicating other professionals may serve up to 60 special education students each week, then other special education professionals have on average only 57 hours per month—14.25 hours per week—available to devote to these 60 students. Given some of the anecdotal descriptions of indirect student services and work settings provided by survey respondents, it appears that other special education professionals devote additional time to traveling between campuses, and testing students, and they spend time at home on their work. Thus, other professionals may be spending considerably more than 40 hours per week on tasks and responsibilities associated with their job.

Special Education Work Environment

In the current study, we viewed the special education work environment as a composite of the policies and procedures, resources, and reward systems available to other special education professionals. When these components are viewed positively by personnel, they contribute to employee retention.

Other special education professionals perceived their school climate to be generally supportive. Overall, professionals felt they had adequate access to resources to aid in working with students, and technology to

assist with paperwork responsibilities. They also had opportunity to assess the progress of their students. On the other hand, other professionals were somewhat less likely to feel that they had adequate time to work directly with their students and adequate clerical support to assist with requisite paperwork. These areas are critical to employee retention and student success and merit attention at the school level.

Many districts provided incentive programs that rewarded other professionals with pay supplements for working in the special education field, taking on additional responsibilities, or increasing knowledge in their field. About half of single district personnel and one-third of SSA personnel reported that their district provided supplements or stipends for working in the special education field. About one-fourth of other special education professionals reported that their district paid other professionals for taking on additional responsibilities. In SSAs, almost one-fifth of the respondents indicated that their district provided reduced class or case loads or release time for taking on additional responsibilities. In addition, about one-fourth of other professionals reported that their districts offered pay incentives for increased knowledge in the field, including pay for passing additional state certification tests, or for completing additional educational programs or relevant professional development.

Surprisingly, there were a few respondents who reported that their districts offered merit pay for individual performance achievement, or bonus pay for school performance achievement. While it is tempting to consider offering incentive plans that reward other special education professionals for exemplary performance, the work of these professionals is not particularly amenable to the creation of measurable performance targets. The degree to which special education professionals can achieve performance goals may be influenced as much by the students' abilities and motivation as by the professionals' skills and effort. Given the difficulties of using merit pay systems for special education professionals, it may be desirable to seek alternative approaches.

One promising incentive system is that of skill-based or knowledge-based pay wherein professionals are paid based on achieving additional skill sets within their job domain. Although the current study provides evidence that many special education professionals have already completed advanced degrees and additional certifications, and have teaching certifications and expertise, there is an ongoing need for new skills. For example, many more bilingual special education professionals will likely be needed in the not too distant future. Anecdotal evidence suggests that special education professionals will need to know some of the Asian languages, as well as Spanish. The special education professionals will also require greater technological literacy, as well as a greater variety of approaches to working with students who are growing up in the Information Age.

Other Special Education Professionals' Job Satisfaction and Turnover

The majority of other special education professionals were satisfied with their jobs. There was a greater range in job satisfaction attitudes among the experienced compared to novice other professionals. In fact, experienced personnel comprised the group of least satisfied personnel (5.0 percent of experienced single district respondents, and 1.9 percent of experienced SSA respondents). As a general rule, individuals who are less satisfied with the job are the most likely to quit. Employees who are ambivalent about the job, or are somewhat dissatisfied, may also be likely to quit. This explanation is consistent with the finding that overall, about one-third of novices, and one-fourth of experienced personnel planned to leave their current job.

Almost one-fifth of the experienced personnel in single districts who were leaving the job were retiring. Other common destinations for special education professional leavers in the experienced group were to an administrative position, a job outside education, and a position in an agency or hospital. One-fourth of the novices who were leaving the job planned to take a position in an agency or hospital. Other common

destinations for novice leavers included a job in another district, retirement, and returning to school, most likely for a doctorate or other advanced degree.

Almost one-fifth of the experienced personnel in SSAs who were leaving their jobs planned to take a position outside education. Other common destinations included a position in another district, an administrative position, and retirement.

It is reasonable to expect novices in other special education professions to leave their jobs to pursue additional education, such as a doctorate in their fields. And we expect experienced other professionals to consider taking administrative positions or retiring. However, it is unusual for novices to retire, and for experienced professionals to switch careers. These phenomena merit further research. It is possible that the heavy workload reported in this study is responsible for the unexpected destinations of leavers. Workload may be a more important aspect of the job environment than the administrative work conditions, availability of resources, or district incentive systems reported in the current study.

Another factor is important in understanding turnover of other special education professionals: numerous other agencies require their services. For example, speech language pathologists can work in hospitals, licensed specialists in school psychology can open their own practice, and physical therapists can work in state agencies. Thus, there are many attractive job opportunities for other special education professionals. School districts must be committed to changing work conditions or human resource policies in order to compete with other organizations in attracting and retaining other special education professionals.

8. Professional Development Needs of Special Education Personnel

In addition to investigating staffing levels and vacancies, the current study included an assessment of professional development needs of special education teachers and other special education professionals. We asked special education administrators to report the types of special education personnel working in their district, and to indicate the degree to which each personnel group needed professional development. We also asked special education teachers and other professionals to report the types of professional development they had completed and to identify the areas in which they desired more training. Survey respondents included 250 special education administrators—184 from single districts (53.5 percent response rate), and 68 from SSAs (51.9 percent response rate), 1,889 teachers—1,530 from single districts (19.6 percent response rate), and 359 from SSAs (26.2 percent response rate), and 806 other professionals—683 from single districts (16.0 percent response rate), and 123 from SSAs (19.3 percent response rate). As noted in Section 2 of this report, respondents from each of these survey groups represented school districts throughout the state. The characteristics of each respondent group were very similar to those of the populations surveyed. Based on these observations, we believe the study results reported in this section represent the professional development needs of special education personnel throughout the state.

This section summarizes special education administrators' perceptions of the degree to which their staff required professional development. It also reports the professional development areas in which teachers and other professionals had obtained training and the areas in which they desired more training.

Special Education Teachers

Administrator Perceptions of Teacher Professional Development Needs

Special education administrators were asked to indicate whether or not their district had various types of personnel during the 2004-05 year. They also rated, on a 4-point scale, the degree to which each personnel group required professional development in special education topics (1 = *not at all*, 2 = *small extent*, 3 = *moderate extent*, 4 = *great extent*). The majority of single districts reported having personnel in each of the teacher groups including alternative certification program (ACP) interns in special education, first-year special education and general education teachers, experienced special education and general education teachers, and special education teachers trained out-of-state (Table 8.1). In SSAs, only one-half reported having ACP interns, and about one-third reported having special education teachers from outside Texas.

Almost all of the single districts and SSAs reported that their teachers needed professional development. However the extent of the need varied by teacher group. Ratings of need for professional development for teacher groups in single districts ranged from 2.9 to 3.6 on the 4-point scale. Ratings for teacher groups in SSAs ranged from 2.9 to 3.4. As expected, experienced special education and general education teachers were less likely to be perceived as needing professional development than other teacher groups. Special education administrators in single districts reported that their ACP interns needed professional development to a greater extent than the other teacher groups.

Table 8.1. Special Education Administrators: Views on Professional Development Needs for Special Education Teachers

Teachers	Single Districts			SSAs		
	Percent with Personnel	Percent Needing PD	Mean Rating of Need for PD	Percent with Personnel	Percent Needing PD	Mean Rating of Need for PD
Alternative certification program interns assigned to special education positions	61.5	97.2	3.6	50.0	100.0	3.4
First-year teachers assigned to special education positions	81.0	97.9	3.4	73.0	100.0	3.4
First-year teachers assigned to general education positions	93.8	95.7	3.3	80.3	100.0	3.5
Experienced special education teachers	98.9	95.9	2.7	95.2	100.0	2.9
Experienced general education teachers	98.3	96.4	2.9	85.5	100.0	3.1
Special education teachers trained out of state	56.1	100.0	3.2	34.9	100.0	3.2

Source. Special Education Administrator Survey.
Note. For percentage with personnel in each category, single district responses varied from 178 to 180; SSA responses ranged from 61 to 64. Percentage needing PD (professional development) represents those districts reporting need for PD to a small extent, moderate extent, or great extent on 4-point rating scale (1=*not at all*, 2= *small extent*, 3= *moderate extent*, 4= *great extent*). Responses for percentage needing PD and rating items ranged from 98 to 170 for single districts, and 22 to 55 for SSAs.

Comparisons with 2001 study. In 2001, the Texas Center for Educational Research published *The Statewide Study of Special Education Professionals' Personnel Needs* which reported the results of a survey of special education administrators similar to the current survey. We compared the results of the current survey with the 2001 results. While all single districts reported having personnel in each teacher group in 2001 and 2005, a smaller proportion in 2005 reported having ACP interns, first-year special education teachers, and special education teachers trained outside Texas (Table 8.2). In general, teachers were perceived as needing professional development to a slightly lesser degree in 2005 compared to 2001. Specifically, ratings of need for professional development were lower in 2005 for first-year teachers in special education (3.6 in 2001, 3.4 in 2005), first-year teachers in general education (3.5 in 2001, 3.3 in 2005), and experienced special education teachers (2.9 in 2001, 2.7 in 2005).

Table 8.2. Special Education Administrators of Single Districts: Comparison of Views on Professional Development Needs for Special Education Teachers in 2001 and 2005

	Single Districts			
	Percent with Personnel		Mean Rating of PD Need	
Special Education Teachers	2001	2005	2001	2005
Alternative certification program interns assigned to special education positions	84.1	61.5	3.5	3.5
First-year teachers assigned to special education positions	94.2	81.0	3.6	3.4
First-year teachers assigned to general education positions	96.6	93.8	3.5	3.3
Experienced special education teachers	99.3	98.9	2.9	2.7
Experienced general education teachers	99.3	98.3	3.0	2.9
Special education teachers trained out-of-state	85.6	56.1	3.1	3.2

Sources. Special Education Director Survey, 2001; Special Education Administrator Survey, 2005.
Note. For 2001, there were 157 single district respondents, and responses varied by item. For 2005, single district responses to percent with personnel items ranged from 178 to 180, and responses to rating of need items ranged from 98 to 170. Rating of need was based on 4-point scale where 1=*not at all*, 2= *small extent*, 3= *moderate extent*, 4= *great extent*.

All SSA respondents had personnel in the various teacher groups in 2005 (Table 8.3). However, a considerably smaller proportion of SSAs in 2005 compared to 2001 reported having personnel in each teacher group except that of experienced special education teachers. In fact, the proportion of districts in 2005 reporting special education teachers trained outside Texas was about one-half that in 2001 (78.6 percent of SSAs in 2001, 34.9 percent in 2005). In general, the perceptions of special education administrators in SSAs in 2005 were similar to those reported for 2001 regarding the extent to which their teachers needed professional development. Similar to the results for single districts, ratings of need for professional development were lower in 2005 compared to 2001 for first-year special education teachers (3.6 in 2001, 3.4 in 2005). On the other hand, administrators' perceived that experienced special education teachers needed professional development to a greater extent in 2005 than in 2001 (2.7 in 2001, 2.9 in 2005).

Table 8.3. Special Education Administrators of SSAs: Comparison of Views on Professional Development Needs for Special Education Teachers in 2001 and 2005

	SSAs			
	Percent with Personnel		Mean Rating of PD Need	
Special Education Teachers	2001	2005	2001	2005
Alternative certification program interns assigned to special education positions	81.2	50.0	3.5	3.4
First-year teachers assigned to special education positions	97.2	73.0	3.6	3.4
First-year teachers assigned to general education positions	91.5	80.3	3.6	3.5
Experienced special education teachers	98.6	95.2	2.7	2.9
Experienced general education teachers	97.2	85.5	3.0	3.1
Special education teachers trained out of state	78.6	34.9	3.3	3.2

Sources. Special Education Director Survey, 2001; Special Education Administrator Survey, 2005.
Note. PD is professional development. For 2001, there were 76 SSA respondents, and responses varied by item. For 2005, SSA responses to percent needing personnel items ranged from 61 to 64; responses to rating of need items ranged from 22 to 55. Rating of need was based on 4-point scale where 1=*not at all*, 2= *small extent*, 3= *moderate extent*, 4= *great extent*.

Teacher Self-Assessment of Professional Development Needs

Special education teachers were asked to report the number of hours of professional development they had completed during the previous two years in a variety of areas (Table 8.4). We computed the average number of hours of training in each area. Special education teachers as a whole had completed the most professional development hours in five areas: continuing education required to maintain certification (21.4 hours in single districts, 19.4 hours in SSAs), general knowledge regarding teaching students with disabilities (17.0 hours in single districts, 14.5 hours in SSAs), general knowledge about the educational system in which they worked (16.1 hours in single districts, 13.5 hours in SSAs), specialized skills for working with students with specific types of disabilities (13.3 in single districts, 11.6 hours in SSAs), and use of technology in education (11.0 in single districts, 9.2 hours in SSAs). In general, teachers in SSAs reported completing slightly fewer hours of training in each area compared to teachers in single districts.

Table 8.4. Professional Development Completed During Previous 2 Years: Special Education Teachers

Professional Development Topic	Teachers in Single Districts		Teachers in SSAs	
	Number Completing PD	Average Hours of PD	Number Completing PD	Average Hours of PD
1. General knowledge about the overall educational system (such as school organization, general education and special education procedures)	1,303	**16.1**	306	**13.5**
2. General knowledge and skills in teaching students with various disabilities (such as disability characteristics, instructional/behavioral strategies)	1,294	**17.0**	305	**14.5**
3. Specialized knowledge and skills in teaching students with specific types of disabilities (such as emotional disturbances, autism)	1,308	**13.3**	308	**11.6**
4. Scope and sequence of the core curriculum (TEKS)	1,280	7.8	306	7.6
5. Evaluation and assessment procedures for determining student eligibility (i.e., condition and educational need)	1,279	5.4	300	4.9
6. Research-based instructional approaches and strategies (core content areas)	1,269	9.3	297	8.8
7. Research-based, positive behavioral support strategies	1,294	8.3	300	7.5
8. Classroom-based assessment to guide instruction	1,242	5.1	294	3.2
9. Federal and state special education laws and regulations	1,294	6.4	307	5.5
10. ARD committee process (such as legal requirements, roles, and responsibilities)	1,294	7.1	302	5.7
11. IEP development, implementation, and evaluation	1,286	7.0	304	6.1
12. Technology utilization for curriculum, instruction, and evaluation	1,295	**11.0**	304	9.2
13. Assistive technology knowledge and skills	1,279	4.5	300	4.0
14. Research-based service provision models	1,236	1.4	296	1.3
15. Strategies for providing services in inclusive settings	1,273	4.8	297	3.6
16. Preparation assistance for the special education Texas teaching certification exam	1,235	2.9	289	2.2
17. Opportunities to observe model programs	1,266	1.9	297	1.1
18. Group processes and teams	1,242	3.4	295	1.8
19. Meet continuing education units (CEU)	1,232	**21.4**	292	**19.4**
20. Stress management	1,267	1.3	297	1.9
21. Visiting and observing experienced special education teachers' classrooms	1,268	2.2	298	1.6
22. Attending national, state, or regional conferences on special education topics.	1,275	6.1	303	6.3
23. Skills in providing training for others	1,259	2.9	296	1.7
24. Leadership skills, decision making, and/or conflict resolution	1,270	3.5	296	3.6
25. Other	88	**21.6**	19	**11.2**

Source. Special Education Teacher Survey.
Note. PD is professional development. There were 1,522 single district teacher respondents, and 357 SSA teacher respondents. **Bold type** indicates greater than 10 hours.

Special education teachers in single districts completed the least number of hours of training in four areas: stress management (1.3 hours), research-based service models (1.4 hours) opportunities to observe model programs (1.9 hours), and observing in experienced special education teachers' classrooms (2.2 hours). In SSAs, teachers completed less than 2 hours of professional development in six areas: opportunities to observe model programs (1.1 hours), research-based service provision models (1.3 hours), observing experienced special education teachers' classrooms (1.6 hours), skills in providing training for others (1.7 hours), group processes and teams (1.8 hours), and stress management (1.9 hours).

The average number of hours of professional development completed during the previous two years by special education teachers in single districts was 157.5 hours. For teachers in SSAs, the average was 138.5 hours of professional development. For single district teachers, this represents almost four weeks of training activities during a two-year period.

For each area of professional development, special education teachers rated the degree to which their training was effective in improving classroom teaching. Effectiveness was rated on a 4-point scale where 1=*not at all effective*, 2=*effective to a small extent*, 3=*effective to a moderate extent*, 4=*effective to a great extent*. The range of ratings provided by single district teachers (2.1 to 3.1) and SSA teachers (1.8 to 3.1) was fairly narrow, and most of the topics were rated as somewhat effective or moderately effective (Table 8.5). The most effective professional development was observed in two areas: general knowledge in teaching students with disabilities (average rating 3.1 in single districts and in SSAs), specialized knowledge in teaching students with specific disabilities (3.1 rating in single districts, 3.0 in SSAs).

Professional development topics rated least effective in improving classroom teaching included: research-based service provision models (2.1 in single districts, 2.0 in SSAs), and preparation for the Texas special education teaching certification exam (2.1 in single districts, 1.8 in SSAs). All remaining topics were rated as somewhat to moderately effective (higher than 2.0 on the 4-point scale) by teachers in single districts and those in SSAs.

Table 8.5. Evaluation of Professional Development: Effectiveness in Improving Special Education Teaching

Professional Development Topic	Teachers in Single Districts		Teachers in SSAs	
	Number Participating in PD	Mean Rating	Number Participating in PD	Mean Rating
1. General knowledge about the overall educational system (such as school organization, general education and special education procedures)	1,279	2.7	277	2.7
2. General knowledge and skills in teaching students with various disabilities (such as disability characteristics, instructional/behavioral strategies)	1,306	**3.1**	289	**3.1**
3. Specialized knowledge and skills in teaching students with specific types of disabilities (such as emotional disturbances, autism)	1,159	**3.1**	265	**3.0**
4. Scope and sequence of the core curriculum (TEKS)	1,080	2.6	233	2.6
5. Evaluation and assessment procedures for determining student eligibility (i.e., condition and educational need)	880	2.6	180	2.6
6. Research-based instructional approaches and strategies (core content areas)	1,000	2.8	219	2.9
7. Research-based, positive behavioral support strategies	1,142	2.9	251	2.9
8. Classroom-based assessment to guide instruction	875	2.8	176	2.7
9. Federal and state special education laws and regulations	1,102	2.7	255	2.7
10. ARD committee process (such as legal requirements, roles, and responsibilities)	1,153	2.8	250	2.8
11. IEP development, implementation, and evaluation	1,166	2.9	247	2.9
12. Technology utilization for curriculum, instruction, and evaluation	1,216	2.9	257	2.9
13. Assistive technology knowledge and skills	912	2.7	182	2.6
14. Research-based service provision models	481	2.1	99	2.0
15. Strategies for providing services in inclusive settings	819	2.6	155	2.5
16. Preparation assistance for the special education Texas teaching certification exam	382	2.1	79	1.8
17. Opportunities to observe model programs	550	2.3	111	2.3
18. Group processes and teams	559	2.3	104	2.2
19. Meet continuing education units (CEU)	773	2.8	176	2.9
20. Stress management	567	2.2	127	2.2
21. Visiting and observing experienced special education teachers' classrooms	596	2.4	120	2.3
22. Attending national, state, or regional conferences on special education topics.	716	2.6	143	2.7
23. Skills in providing training for others	552	2.3	114	2.2
24. Leadership skills, decision making, and/or conflict resolution	695	2.5	143	2.5

Source. Special Education Teacher Survey.
Note. PD is professional development. Effectiveness of professional development in improving teaching was rated on a 4-point scale where 1=*not at all effective*, 2=*effective to a small extent*, 3=*effective to a moderate extent*, 4=*effective to a great extent*. **Bold type** indicates rating of 3.0 or higher.

We asked special education teachers to assess their own needs for further professional development. Overall, there were twelve areas in which 70 percent or more of the single district or SSA teachers desired additional training (Table 8.6). For the most part, these areas included topics the teachers rated as moderately effective in improving classroom teaching. However, professional development in two areas—stress management and observing experienced teachers' classrooms—received fairly low effectiveness ratings from the teachers.

The areas for future professional development identified by the greatest proportions of special education teachers were specialized knowledge in teaching students with specific disabilities (89.1 percent of single district teachers, 86.5 percent of SSA teachers), general knowledge in teaching students with disabilities (83.9 percent in single districts, 77.4 percent in SSAS), attending conferences on special education topics (79.9 percent in single districts, 81.1 percent in SSAs), use of technology in education (77.8 percent in single districts, 77.7 percent in SSAs), research-based positive behavioral support strategies (76.8 percent in single districts, 75.6 percent in SSAs), observing model programs (76.5 percent in single districts, 72.8 percent in SSAs).

Considering the average number of professional development hours special education teachers completed during the past two years, it is possible that the number of hours are adequate, but the areas are not matched to teacher needs. For example, teachers had many hours on professional development addressing general knowledge about the educational system, yet this was chosen for future professional development by only about one-half or less of the teachers. Furthermore, teachers spent the greatest number of professional development hours on continuing education to maintain certification, yet less than 60 percent of teachers selected this as an area in which they needed additional training.

Table 8.6. Special Education Teachers' Need for Additional Professional Development

Professional Development Topic	Teachers in Single Districts		Teachers in SSAs	
	Number Desiring More Training	Percent	Number Desiring More Training	Percent
1. General knowledge about the overall educational system (such as school organization, general education and special education procedures)	630	52.6	110	43.1
2. General knowledge and skills in teaching students with various disabilities (such as disability characteristics, instructional/behavioral strategies)	1006	**83.9**	209	**77.4**
3. Specialized knowledge and skills in teaching students with specific types of disabilities (such as emotional disturbances, autism)	1047	**89.1**	230	**86.5**
4. Scope and sequence of the core curriculum (TEKS)	651	58.4	138	57.5
5. Evaluation and assessment procedures for determining student eligibility (i.e., condition and educational need)	672	63.5	142	61.5
6. Research-based instructional approaches and strategies (core content areas)	770	72.4	161	68.8
7. Research-based, positive behavioral support strategies	860	**76.8**	192	**75.6**
8. Classroom-based assessment to guide instruction	722	69.6	147	65.6
9. Federal and state special education laws and regulations	805	70.9	182	71.9
10. ARD committee process (such as legal requirements, roles, and responsibilities)	716	62.7	149	57.5
11. IEP development, implementation, and evaluation	756	66.8	165	63.5
12. Technology utilization for curriculum, instruction, and evaluation	885	**77.8**	202	**77.7**
13. Assistive technology knowledge and skills	743	70.1	156	64.5
14. Research-based service provision models	404	47.7	82	43.6
15. Strategies for providing services in inclusive settings	744	73.1	146	65.2
16. Preparation assistance for the special education Texas teaching certification exam	174	21.5	43	22.6
17. Opportunities to observe model programs	739	**76.5**	158	**72.8**
18. Group processes and teams	442	49.9	82	40.4
19. Meet continuing education units (CEU)	551	59.2	130	58.8
20. Stress management	700	70.4	145	64.4
21. Visiting and observing experienced special education teachers' classrooms	735	74.5	166	72.5
22. Attending national, state, or regional conferences on special education topics.	805	**79.9**	189	**81.1**
23. Skills in providing training for others	580	61.4	114	55.9
24. Leadership skills, decision making, and/or conflict resolution	659	66.2	138	61.9

Source. Special Education Teacher Survey.
Note. PD is professional development. Respondents for each topic varied from 808 to 1,199 for teachers in single districts and from 188 to 270 for teachers in SSA participant districts. Bold type indicates areas of greatest need for teachers in both single districts and SSAs.

Other Special Education Professionals and Special Education Paraprofessionals

Administrator Perceptions of Professional Development

Special education administrators reported on professional development needs of other special education professionals and paraprofessionals by job title. Almost all single district and SSA respondents reported having educational diagnosticians and speech language pathologists, and most had occupational therapists, physical therapists, and licensed specialists in school psychology (Table 8.7). In addition, almost all respondents indicated the personnel in other special education professional jobs needed professional development. However, the need was in the small to moderate range for single districts (ratings ranging from 2.4 to 2.8 on the 4-point scale), and slightly greater for SSAs (ratings ranging from 2.4 to 3.0). These ranges are notably lower than those reported earlier for the teacher groups. In particular, ratings were lowest for orientation and mobility specialists (2.4 for single districts and SSAs), physical therapists (2.5 for single districts and 2.7 for SSAs), and occupational therapists (2.6 for single districts and SSAs). Personnel in these types of positions may have more experience working with various disabilities in pre-service programs, or in their prior work experience, and thus have less need for professional development in this area.

Table 8.7. Special Education Administrators: Views on Professional Development Needs for Other Special Education Professionals and Special Education Paraprofessionals

	Single Districts			SSAs		
Job Title	Percent with Personnel	Percent Needing PD	Mean Rating of Need for PD	Percent with Personnel	Percent Needing PD	Mean Rating of Need for PD
Other Special Education Professionals						
Educational diagnostician	93.9	93.9	2.8	97.1	96.8	2.9
Bilingual educational diagnostician	42.5	92.9	2.8	32.4	90.9	2.8
Speech language pathologist, licensed or certified	98.3	94.1	2.7	97.1	93.7	2.8
Bilingual speech language pathologist	42.1	94.3	2.8	13.4	100.0	2.7
Licensed specialist in school psychology	70.6	95.0	2.8	63.2	100.0	3.0
Bilingual licensed specialist in school psychology	24.2	97.4	2.7	10.4	100.0	3.0
Occupational therapist	81.6	88.4	2.6	79.1	94.1	2.6
Physical therapist	76.5	86.2	2.5	70.6	95.7	2.7
Orientation and mobility specialist	56.7	79.4	2.4	50.7	93.7	2.4
Sign language interpreter	34.7	86.4	2.6	31.3	95.0	2.9
Special Education Paraprofessionals						
Special education paraprofessional	98.9	95.3	3.1	92.3	98.2	3.1

Source. Special Education Administrator Survey.
Note. For percentage with personnel in each category, single district responses varied from 176 to 180; SSA responses ranged from 67 to 68. Percentage needing PD (professional development) represents those districts reporting need for PD to a small extent, moderate extent, or great extent on 4-point rating scale (1=*not at all*, 2= *small extent*, 3= *moderate extent*, 4= *great extent*). Responses for percentage needing PD and rating items ranged from 39 to 169 for single districts, and 7 to 63 for SSAs.

Almost all respondents indicated they had special education paraprofessionals in their districts, and they indicated the personnel in this job needed professional development in special education topics. As

expected, the ratings of need for professional development for this job group (3.1 for single districts and SSAs) were lower than those for some of the teacher groups, but higher than those for other special education professionals. In fact, the mean rating of need for professional development was considerably lower for paraprofessionals than for first-year teachers and for ACP interns. It is possible that the practically-oriented paraprofessional training programs provide somewhat more exposure to the various types of disabilities experienced by special education students.

Comparisons with 2001 study. In comparison to the 2001 special education survey results (TCER, 2001), the proportion of single districts that reported having personnel in each job group was slightly smaller in 2005 compared to 2001 (Table 8.8). For example, 96.1 percent of special education administrators reported having educational diagnosticians in 2001, while 93.9 percent reported having personnel in this job in 2005. Similarly, 73.2 percent of administrators indicated they had licensed specialists in school psychology in 2001, and 70.6 percent had personnel in this job in 2005.

Table 8.8. Special Education Administrators of Single Districts: Comparison of Views on Professional Development Needs for Other Special Education Professionals and Special Education Paraprofessionals in 2001 and 2005

	Single Districts			
	Percent Having Position		Mean Rating of Need for PD	
Type of Position	2001	2005	2001	2005
Other Special Education Professionals				
Educational diagnostician	96.1	93.9	3.0	2.8
Bilingual educational diagnostician	51.4	42.5	3.1	2.8
Speech language pathologist, licensed or certified	98.7	98.3	2.9	2.7
Bilingual speech language pathologist	52.1	42.1	3.0	2.8
Licensed specialist in school psychology	73.2	70.6	2.8	2.8
Bilingual licensed specialist in school psychology	35.4	24.2	2.9	2.7
Occupational therapist	83.2	81.6	2.7	2.6
Physical therapist	78.0	76.5	2.6	2.5
Orientation and mobility specialist	57.9	56.7	2.5	2.4
Sign language interpreter	41.3	34.7	2.7	2.6
Special Education Paraprofessionals				
Special education paraprofessional	98.0	98.9	3.4	3.1

Sources. Special Education Director Survey, 2001; Special Education Administrator Survey, 2005.
Note. For 2001, there were 157 single district respondents, and responses varied by item. For 2005, single district responses to percent with personnel items ranged from 176 to 180, and responses to rating of need items ranged from 39 to 169. Rating of need was based on a 4-point scale where 1=*not at all*, 2=*small extent*, 3=*moderate extent*, 4=*great extent*.

Personnel in other special education professions were reported as needing professional development to the same or a lesser extent in 2005 compared to 2001. Specifically, about half of the jobs were rated the same in terms of the degree to which they needed professional development in special education topics. The other half had somewhat lower ratings, including educational diagnosticians (3.0 in 2001, 2.8 in 2005) and speech language pathologists (2.9 in 2001, 2.7 in 2005). Furthermore, each of the bilingual professional positions was rated as needing professional development in 2005 to a lesser degree than they were in 2001. This is one indication that the overall knowledge and skill level of other special education professionals in Texas schools has improved since the last TCER study of special education personnel needs.

Almost all single districts and SSAs reported having personnel in the special education paraprofessional position in 2001 and 2005 (Tables 8.8 and 8.9). In addition, administrators perceived there to be a somewhat lesser need in 2005 for professional development for this job group in single districts (mean rating of 3.4 in 2001, 3.1 in 2005), and in SSAs (mean rating of 3.3 in 2001, 3.1 in 2005).

SSA respondents reported personnel in all of the various other professional job groups in 2005 (Table 8.9), however, smaller proportions of administrators reported having personnel in these jobs. In particular, the proportion of SSAs reporting bilingual speech language pathologists decreased from 41.8 percent in 2001, to 13.4 percent in 2005, and the proportion reporting bilingual licensed specialists in school psychology decreased from 32.8 percent in 2001 to 10.4 percent in 2005.

In general, SSA administrators perceived their personnel in the other professional positions to need professional development to the same or greater degree in 2005 compared to 2001. Two job groups, in particular, required additional professional development: licensed specialists in school psychology (mean rating of 2.7 in 2001, 3.0 in 2005), and sign language interpreters (mean rating of 2.7 in 2001, 2.9 in 2005).

Table 8.9. Special Education Administrators of SSAs: Comparison of Views on Professional Development Needs for Other Special Education Professionals and Special Education Paraprofessionals in 2001 and 2005

	SSAs			
	Percent Having Position		Mean Rating of Need for PD	
Type of Position	2001	2005	2001	2005
Special Education Professionals				
Educational diagnostician	100.0	97.1	2.8	2.9
Bilingual educational diagnostician	49.3	32.4	2.8	2.8
Speech language pathologist, licensed or certified	98.7	97.1	2.9	2.8
Bilingual speech language pathologist	41.8	13.4	2.6	2.7
Licensed specialist in school psychology	73.7	63.2	2.7	3.0
Bilingual licensed specialist in school psychology	32.8	10.4	3.0	3.0
Occupational therapist	84.7	79.1	2.7	2.6
Physical therapist	78.9	70.6	2.7	2.7
Orientation and mobility specialist	60.9	50.7	2.4	2.4
Sign language interpreter	48.6	31.3	2.7	2.9
Special Education Paraprofessionals				
Special education paraprofessional	100.0	92.3	3.3	3.1

Sources. Special Education Director Survey, 2001; Special Education Administrator Survey, 2005.
Note. For 2001, there were 76 SSA respondents, and responses varied by item. For 2005, SSA responses to percent needing personnel items ranged from 67 to 68; responses to rating of need items ranged from 7 to 63. Rating of need was based on a 4-point scale where 1=*not at all*, 2=*small extent*, 3=*moderate extent*, 4=*great extent*.

Special Education Professionals' Self-Assessment

Similar to special education teachers, other special education professionals reported the number of hours of professional development they had completed during the past two years. They also provided an assessment of the effectiveness of their training experiences, and identified the areas in which they desired professional development in the future. We computed the mean number of hours of training completed by other professionals. The average hours of professional development for each topic area for other professionals in single districts were quite similar to the averages reported in SSAs (Table 8.10). However, other professionals in SSAs spent considerably more time in Individualized Education Program

(IEP) development, implementation, and evaluation (average of 14.7 hours) than did those in single districts (average of 7.9 hours).

Areas in which other special education professionals spent the most hours included: meeting continuing education requirements for maintaining certification (27.5 hours in single districts, 28.0 hours in SSAs), evaluation and assessment for determining student eligibility (20.3 hours in single districts, 15.9 hours in SSAs).

Other special education professionals completed the least number of hours training in five areas: preparation for the Texas special education teaching certification exam (0.2 hours in single districts, 0.3 in SSAs), observing model programs (0.6 in single districts, 0.9 in SSAs), stress management (0.6 in single districts, 0.4 in SSAs), research-based service provision models (1.8 in single districts, 1.9 in SSAs), and classroom-based assessment to guide instruction (2.1 hours in single districts, 1.3 hours in SSAs). Other professionals in SSAs also spent very little time observing experienced special education teachers' classrooms (1.5 hours). While some of these areas are obviously oriented toward special education teachers rather than other special education professionals, for example, preparation for the teaching certification exam, most of the other areas appear to have utility for both teachers and other professionals.

On average, other professionals in single districts completed 179.0 hours of professional development during the previous two years, and other professionals in SSAs completed an average of 183.3 hours. These hours represent more than four weeks of training. Compared to special education teachers (Table 8.4), other special education professionals appear to have participated in somewhat more professional development—overall, and in the areas of continuing education to maintain certification, and evaluation and assessment procedures for determining student eligibility.

Table 8.10. Other Special Education Professionals: Professional Development Completed During Previous 2 Years

Professional Development Topic	Other Professionals, Single Districts		Other Professionals, SSAs	
	No. Completing PD	Avg. Hours of PD	No. Completing PD	Avg. Hours of PD
1. General knowledge about the overall educational system (such as school organization, general education and special education procedures)	566	**16.6**	91	**17.0**
2. General knowledge and skills in teaching students with various disabilities (such as disability characteristics, instructional/behavioral strategies)	564	**13.2**	94	**14.2**
3. Specialized knowledge and skills in teaching students with specific types of disabilities (such as emotional disturbances, autism)	574	**15.6**	94	**15.4**
4. Scope and sequence of the core curriculum (TEKS)	563	8.6	93	3.0
5. Evaluation and assessment procedures for determining student eligibility (i.e., condition and educational need)	579	**20.3**	93	**15.9**
6. Research-based instructional approaches and strategies (core content areas)	547	4.0	90	6.1
7. Research-based, positive behavioral support strategies	554	5.2	90	6.1
8. Classroom-based assessment to guide instruction	541	2.1	90	1.3
9. Federal and state special education laws and regulations	573	**12.4**	90	**12.5**
10. ARD committee process (such as legal requirements, roles, and responsibilities)	581	**10.6**	91	**12.0**
11. IEP development, implementation, and evaluation	566	7.9	90	**14.7**
12. Technology utilization for curriculum, instruction, and evaluation	555	6.0	92	5.6
13. Assistive technology knowledge and skills	562	7.9	93	6.9
14. Research-based service provision models	543	1.8	92	1.9
15. Strategies for providing services in inclusive settings	557	3.5	94	3.8
16. Preparation assistance for the special education Texas teaching certification exam	544	0.2	92	0.3
17. Opportunities to observe model programs	549	0.6	94	0.9
18. Group processes and teams	544	3.1	90	2.2
19. Meet continuing education units (CEU)	566	**27.5**	94	**28.0**
20. Stress management	547	0.6	92	0.4
21. Visiting and observing experienced special education teachers' classrooms	547	3.5	91	1.5
22. Attending national, state, or regional conferences on special education topics.	567	**16.8**	94	**16.9**
23. Skills in providing training for others	545	4.1	94	8.7
24. Leadership skills, decision making, and/or conflict resolution	547	2.8	95	3.3
25. Other	119	2.9	22	6.6

Source. Other Special Education Professionals Survey.
Note. PD is professional development. There were 660 other professionals from single districts, and 119 from SSAs who provided data for this table**. Bold type** indicates percentages greater than 10 percent.

Other professionals rated the degree to which their training was effective in improving their work as a special education professional. Effectiveness was rated on the same 4-point scale used by the special education teachers (1=*not at all effective*, 2=*effective to a small extent*, 3=*effective to a moderate extent*, 4=*effective to a great extent*). The range of ratings provided by other professionals was fairly narrow (1.4 to 3.3 in single districts, 1.5 to 3.4 in SSAs) (Table 8.11). However, there appeared to be more variation in ratings among other special education professionals in comparison to special education teachers (Table 8.5).

Other professionals rated several areas as more than moderately effective: continuing education to maintain certification (3.3 in single districts, 3.4 in SSAs), evaluation and assessment for determining student eligibility (3.3 in single districts, 3.4 in SSAs), attending conferences on special education topics (3.3 in single districts, 3.2 in SSAs), federal and state laws and regulations (3.2 in single districts, 3.3 in SSAs), and specialized knowledge in teaching students with specific disabilities (3.2 in single districts, 3.3 in SSAs).

Professional development topics these personnel rated as least effective in improving work in their field included preparation for the Texas special education teaching certification exam (1.4 in single districts, 1.5 in SSAs), and stress management (1.9 in single districts, 2.0 in SSAs). Professional development activities for remaining topics were rated moderately effective.

Table 8.11. Other Special Education Professionals' Evaluation of Professional Development in Previous 2 Years: Effectiveness in Improving Special Education Services

Professional Development Topic	Professionals in Single Districts		Professionals in SSAs	
	No. Participating in PD	Mean Rating	No. Participating in PD	Mean Rating
1. General knowledge about the overall educational system (such as school organization, general education and special education procedures)	518	2.7	93	2.8
2. General knowledge and skills in teaching students with various disabilities (such as disability characteristics, instructional/behavioral strategies)	517	**3.0**	96	**3.2**
3. Specialized knowledge and skills in teaching students with specific types of disabilities (such as emotional disturbances, autism)	536	**3.2**	96	**3.3**
4. Scope and sequence of the core curriculum (TEKS)	332	2.4	52	2.5
5. Evaluation and assessment procedures for determining student eligibility (i.e., condition and educational need)	579	**3.3**	99	3.4
6. Research-based instructional approaches and strategies (core content areas)	283	2.6	51	2.8
7. Research-based, positive behavioral support strategies	385	2.7	69	2.9
8. Classroom-based assessment to guide instruction	220	2.4	37	2.2
9. Federal and state special education laws and regulations	550	**3.2**	100	**3.3**
10. ARD committee process (such as legal requirements, roles, and responsibilities)	528	**3.1**	97	**3.2**
11. IEP development, implementation, and evaluation	458	**3.0**	85	**3.1**
12. Technology utilization for curriculum, instruction, and evaluation	390	2.7	74	2.8
13. Assistive technology knowledge and skills	441	2.8	81	**3.0**
14. Research-based service provision models	227	2.4	39	2.6
15. Strategies for providing services in inclusive settings	328	2.6	59	2.7
16. Preparation assistance for the special education Texas teaching certification exam	102	1.4	24	1.5
17. Opportunities to observe model programs	172	2.0	39	2.5
18. Group processes and teams	227	2.3	34	2.4
19. Meet continuing education units (CEU)	487	**3.3**	88	**3.4**
20. Stress management	195	1.9	36	2.0
21. Visiting and observing experienced special education teachers' classrooms	201	2.3	43	2.6
22. Attending national, state, or regional conferences on special education topics.	446	**3.3**	84	*3.2*
23. Skills in providing training for others	238	2.5	49	2.5
24. Leadership skills, decision making, and/or conflict resolution	253	2.4	48	2.5

Source. Other Special Education Professionals Survey.
Note. PD is professional development. Effectiveness of professional development in improving teaching was rated on a 4-point scale where 1=*not at all effective*, 2=*effective to a small extent*, 3=*effective to a moderate extent*, 4=*effective to a great extent*. There were 660 other professional respondents from single districts, and 119 from SSAs. **Bold type** indicates ratings of 3.0 or higher.

Similar to special education teachers, other special education professionals reported their needs for further professional development. There were ten areas in which 70 percent or more of single district or SSA other professionals desired additional training (Table 8.12). These areas included topics the other professionals rated as moderately effective in improving work in their field.

The areas for future professional development identified by the greatest proportions of other special education professionals were: attending conferences on special education topics (85.1 percent in single districts, 77.1 percent in SSAs), specialized knowledge in teaching students with specific disabilities (83.9 percent of single district teachers, 85.9 percent of SSA teachers), federal and state laws and regulations (81.7 percent in single districts, 86.4 percent in SSAs), evaluation and assessment for determining student eligibility (81.6 percent in single districts, and in SSAs), continuing education to maintain certification (74.4 percent in single districts, 90.1 percent in SSAs), general knowledge in teaching students with various disabilities (71.9 percent in single districts, 68.8 percent in SSAs), ARD committee process (67.5 percent in single districts, 78.8 percent in SSAs), IEP development, implementation, and evaluation (66.8 percent in single districts, 77.2 percent in SSAs), assistive technology and skills (69.1 percent in single districts, 76.9 percent in SSAs), and use of technology in education (63.4 percent in single districts, 73.9 percent in SSAs).

Interestingly, the professional development topics that other professionals desired for future training were the same areas in which they had already completed a significant number of hours training. Many of these areas pertain to the regulatory environment, which is continually changing. Thus, new professional development would be needed periodically in these areas.

Table 8.12. Other Special Education Professionals' Reported Need for More Training

Professional Development Topic	Professionals in Single Districts		Professionals in SSAs	
	Number Desiring More Training	Percent of Respondents	Number Desiring More Training	Percent of Respondents
1. General knowledge about the overall educational system (such as school organization, general education and special education procedures)	248	48.9	45	53.6
2. General knowledge and skills in teaching students with various disabilities (such as disability characteristics, instructional/behavioral strategies)	353	**71.9**	55	**68.8**
3. Specialized knowledge and skills in teaching students with specific types of disabilities (such as emotional disturbances, autism)	433	**83.9**	73	**85.9**
4. Scope and sequence of the core curriculum (TEKS)	227	52.1	29	46.8
5. Evaluation and assessment procedures for determining student eligibility (i.e., condition and educational need)	427	**81.6**	71	**81.6**
6. Research-based instructional approaches and strategies (core content areas)	227	57.9	36	52.2
7. Research-based, positive behavioral support strategies	318	69.6	50	35.8
8. Classroom-based assessment to guide instruction	184	48.4	29	48.3
9. Federal and state special education laws and regulations	425	**81.7**	76	**86.4**
10. ARD committee process (such as legal requirements, roles, and responsibilities)	351	**67.5**	67	**78.8**
11. IEP development, implementation, and evaluation	318	**66.8**	61	**77.2**
12. Technology utilization for curriculum, instruction, and evaluation	287	**63.4**	51	**73.9**
13. Assistive technology knowledge and skills	327	**69.1**	60	**76.9**
14. Research-based service provision models	248	62.5	28	45.9
15. Strategies for providing services in inclusive settings	307	69.3	51	69.9
16. Preparation assistance for the special education Texas teaching certification exam	33	10.1	3	5.5
17. Opportunities to observe model programs	245	64.5	45	65.2
18. Group processes and teams	146	38.6	22	37.9
19. Meet continuing education units (CEU)	357	**74.4**	73	**90.1**
20. Stress management	216	54.4	38	60.3
21. Visiting and observing experienced special education teachers' classrooms	226	58.5	40	62.5
22. Attending national, state, or regional conferences on special education topics.	406	**85.1**	64	**77.1**
23. Skills in providing training for others	222	55.2	38	57.6
24. Leadership skills, decision making, and/or conflict resolution	253	60.8	34	54.8

Source. Other Special Education Professionals Survey.
Note. PD is professional development. Respondents for each topic varied from 327 to 523 for other professionals in single districts and from 55 to 88 for teachers in SSAs and SSA participant districts. Bold type indicates areas of greatest need for other professionals in both single districts and SSAs.

Summary and Conclusions

Special Education Teachers and Professional Development

In general, special education administrators reported that all their teaching personnel required additional professional development in special education topics. However, they perceived experienced teachers to need professional development to a lesser degree than other teaching personnel, particularly in single districts.

Special education teachers, on average, reportedly completed almost four weeks of professional development during the previous two years. Teachers in SSAs completed somewhat fewer hours than did teachers in single districts.

Special education teachers in single districts spent the greatest number of hours of professional development on learning in the following areas: continuing education to maintain certification (21.4 hours on average), general knowledge and skills relative to teaching students with various disabilities (such as disability characteristics, and instructional or behavioral strategies) (17.0 hours), general knowledge regarding the overall educational system (such as school organization, general education, and special education procedures) (16.1 hours), specialized knowledge and skills in teaching students with specific disabilities (such as emotional disturbances, autism, etc.) (13.3 hours), and technology utilization for curriculum, instruction, and evaluation (11.0 hours). These areas were also the ones in which teachers in SSAs spent the greatest number of hours.

Overall, special education teachers rated their professional development as moderately effective in improving classroom teaching. In two areas, teachers' evaluations of their training were slightly higher: general knowledge and skills relative to teaching students with various disabilities, and specialized knowledge and skills in teaching students with specific disabilities. Furthermore, these two areas were the most likely to be chosen when teachers were asked to indicate the topics in which they desired more professional development. Approximately three-quarters of special education administrators indicated that insufficient prior experience working with particular disabilities was a barrier to retention of special education teachers in their districts. It is possible that meeting the professional development needs reported here would be one remedy for this perceived lack of expertise. A large proportion of teachers were also interested in attending national, state, or regional conferences on special education topics.

Other Special Education Professionals and Professional Development

Most special education administrators reported that other special education professionals required additional professional development, however, these personnel, in comparison to experienced teachers, were perceived to need professional development to the same or a lesser extent.

Other professionals completed relatively more hours of professional development during the previous two years than did special education teachers. On average, they completed about four and one-half weeks of training. This may be due in part to other professionals spending a greater number of hours on continuing education to maintain certification than teachers spent in this area.

Other special education professionals in single districts spent the most hours in the following areas of professional development: continuing education to maintain certification (27.5 hours, on average); evaluation and assessment procedures for determining student eligibility (i.e., condition and educational need) (20.3 hours); attending national, state, or regional conferences on special education topics (16.8 hours); general knowledge regarding the overall educational system (16.6 hours), and specialized knowledge and skills in teaching students with specific disabilities (15.5 hours). Other professionals in

SSAs spent the most hours on professional development in these areas, and in IEP development, implementation, and evaluation.

Some of the professional development areas were particularly useful to other professionals, whereas others appeared to have little utility in improving their work with special education students. Areas other professionals perceived to be more effective included evaluation and assessment for determining student eligibility, continuing education to maintain certification, and attending national, state or regional conferences on special education topics. In SSAs, other professionals also rated as more effective the professional development addressing federal and state special education laws and regulations.

Most other special education professionals were interested in additional professional development in several areas, particularly: attending conferences on special education topics, specialized knowledge and skills in teaching students with specific disabilities, federal and state laws and regulations, and evaluation and assessment for determining student eligibility. In SSAs, almost all other professionals chose continuing education to maintain certification as an area for future professional development.

In general, the results reported here support the utility of professional development for special education teachers and other professionals. Further professional development in areas rated as effective and desired as additional training can also be useful in addressing critical barriers to retention, particularly in handling the paperwork burden, dealing with the legal environment of special education, and managing job stress.

9. Special Education Staffing in Charter Schools

In addition to the administrators surveyed in independent school districts and SSAs, we surveyed special education administrators in charter schools and in special education SSAs comprised of charter schools. In order to obtain human resource data for our study, we surveyed charter school directors. As noted in Section 2, we did not survey charter schools that were identified as alternative education programs. Respondents for the *special education administrator* survey included 28 special education administrators in single charter districts (17.5 percent response rate), and 4 special education administrators of SSAs comprised of charter schools (75.0 percent response rate). Respondents for the *human resource administrator* survey included 37 directors of single charter schools (23.1 percent response rate), 8 directors of charter schools participating in a special education SSA (28.6 percent response rate), and 3 SSA special education directors (75.0 percent response rate).

We report special education personnel positions and vacancy data for (a) single district charter schools and SSA participant charter schools, and (b) special education SSAs comprised of charter schools. The results presented later in this section regarding recruitment and retention of special education personnel includes data from the single district and SSA participant schools. While 3 of the 4 charter school special education SSAs participated in the survey, we have not reported their questionnaire responses in this section due to the small size of this group. Analysis of this subset of survey data indicated that the range of responses was within the range of results reported for the single district and SSA participant district charter schools.

As discussed in Section 2 of this report, survey respondents of charter schools represented charter schools throughout the state, and their student enrollment demographic characteristics appeared to be similar to those of charter schools as a whole in Texas. Therefore, we feel the results of the current study may be generalized to the population of Texas charter schools.

This section summarizes the results of our surveys of *human resource administrators* and *special education administrators*. It includes a summary of the staffing levels for special education positions in charter schools and charter schools participating in SSAs, as well as positions staffed by SSAs comprised of charter schools. This section also discusses the recruitment, staffing, and retention strategies being used in these schools

Special Education Personnel Staffing Needs

Teacher Positions and Shortages

Charter schools and charter school SSAs responding to the *human resource administrator* survey reported a total of 390.8 special education FTE position. Of these positions, 60.1 percent were for teachers, 24.8 percent were for other special education professionals, and 15.2 percent were for special education paraprofessionals.

Special education teachers. The greatest number of special education FTE teacher positions were for positions working with students who have a variety of disabilities, and positions working with students in resource or content mastery (Table 9.1). The greatest number of vacancies reported were for teachers in working with students in resource or content mastery. There were no vacancies reported for teacher positions working with students who have moderate to severe disabilities.

While the vacancy rates for many of the teacher positions were very high, they represented few total FTE positions, and consequently, few vacant FTE positions. Thus, it is difficult to identify the most critical needs from an analysis of vacancy rates alone. We surmise that the most critical teacher shortage for charter schools may be in the area of special education teachers working in resource or content mastery. This is the area in which there were the most total vacancies for traditional schools as well as for charter schools.

The extent of the high vacancy rates for special education teacher positions in charter schools is of particular concern. The vacancy rates were considerably higher for charter schools than for traditional school districts. In addition, respondent data indicated that a large proportion of some charter school teacher positions were not staffed at the time of the survey. For example, 6 out of 7 FTE preschool teacher positions were vacant (85.7 percent vacancy rate), and 6 out of 15 FTE positions (40.0 percent vacancy rate) were vacant for teachers working with students who have auditory impairments. These results suggest that special education teachers generally are in short supply for positions in charter schools.

Table 9.1. Teacher Positions and Vacancy Rates for Charter Schools Including Single Districts, SSAs, and SSA Participant Schools

Special Education Teacher Position	Total FTE Reported	Total Vacancy FTE Reported	Total Vacancy Rate (%)
Teachers working with students in resource and/or content mastery	54.7	9.5	17.4
Teachers working with students who have moderate to severe disabilities (i.e., Life Skills classes)	12.7	0.0	0.0
Teachers working with students who have a variety of disabilities (various teacher assignments)	68.2	6.5	9.5
Teachers working with students ages 3-5 (i.e., Preschool Program for Children with Disabilities)	7.0	6.0	85.7
Teachers working with students who have emotional disturbances (adaptive behavior issues)	34.7	3.0	8.6
Teachers working with students who have limited English proficiency (i.e., dual certified teachers)	24.7	6.0	24.3
Teachers working with students who have auditory impairments	15.0	6.0	40.0
Teachers working with students in home-based settings	9.2	3.0	32.6
Teachers working with students who have visual impairments	3.5	2.0	57.1
Teachers working with students who have autism	5.0	2.0	40.0
Totals	**234.7**	**44.0**	**18.7**

Source. Human Resource Administrator Survey.

Other special education professionals. Relative to other special education positions in charter schools, the greatest number of FTE positions were allocated for licensed specialists in school psychology, educational diagnosticians, and speech language pathologists (Table 9.2). The greatest number of FTE vacancies were for licensed specialists in school psychology. Thus, we anticipate that the most critical shortage is in this area. As was true for the special education teacher positions, the vacancy rates were very high for many of the other professional positions, but the total number of FTE positions were few.

Since large proportions of the FTE positions for other professionals were not staffed, it appears that charter schools are experiencing critical shortages generally among the other professional positions.

Table 9.2. Other Special Education Professional and Paraprofessional Positions and Vacancy Rates for Charter Schools Including Single Districts, SSAs, and SSA Participant Schools

Position	Total FTE Reported	Total Vacancy FTE Reported	Total Vacancy Rate (%)
Other Special Education Professionals			
Educational diagnosticians	19.0	4.0	21.1
Speech language pathologists	18.3	4.0	21.9
Bilingual educational diagnosticians	5.8	4.0	69.0
Specialists in school psychology	21.7	6.0	27.6
Sign language interpreters	2.0	2.0	100.0
Occupational therapists	8.1	4.0	49.7
Physical therapists	6.3	4.0	64.0
Bilingual speech language pathologists	7.8	5.0	64.1
Orientation and mobility specialists	1.0	1.0	100.0
Bilingual specialists in school psychology	7.0	4.0	57.1
Totals	**96.8**	**38.0**	**39.3**
Special Education Paraprofessionals			
Totals	**59.3**	**7.0**	**11.8**

Source. Human Resource Administrator Survey.

Paraprofessionals. The vacancy rate for special education paraprofessional FTE positions was fairly low relative to the rates for other special education positions in charter schools. However, it was somewhat higher than that reported for traditional school districts (11.8 percent in charter schools, 3.2 percent in traditional schools).

Personnel Turnover and Destinations of Leavers

We asked charter school directors (completing the *human resource administrator* survey) to report the turnover rates for personnel who left their jobs after the 2003-04 school year. The average turnover rate for special education teachers in charter schools was 26.1 percent (based on data from 40 respondents). The average turnover of other special education professionals was 18.6 percent (based on data from 34 respondents). These rates are considerably higher than those reported for traditional school districts in Section 3 of this report (14.8 percent for teachers, 12.0 percent for other professionals).

Charter school directors reviewed a list of potential destinations of job leavers that we generated from a review of the literature on special education personnel. They selected the three most common destinations of personnel who had left their jobs during the previous two years. The most common destinations for special education teachers leaving their jobs were a special education teaching position in another district (33.3 percent of respondents), returning to school (13.3 percent of respondents) , and attending to home making, child rearing, or caring for elderly or ill family members (13.3 percent of respondents) (Table 9.3). From these data, it appears that teachers who leave are most likely taking a job in another school district.

Table 9.3. Charter Schools: Administrator Assessments of Most Common Work Destinations for Special Education Personnel Who Left the Job

	Teachers		Other Professionals	
Work Destination of Leavers	Number	Percent	Number	Percent
Special education position in another LEA	15	33.3	5	11.1
Special education position in a public or private agency or hospital	3	6.7	0	0.0
Position outside special education in another LEA	3	6.7	3	6.7
Position outside special education within their LEA	1	2.2	0	0.0
Administrative or non-teaching position within their LEA	3	6.7	3	6.7
Administrative or non-teaching position in another LEA	1	2.2	2	4.4
Position outside of education	1	2.2	6	13.3
Returning to school	6	13.3	7	15.6
Attending to home making, child rearing, and/or caring for elderly or ill family members	6	13.3	4	8.9
Retiring	3	6.7	2	4.4
Relocating to another community for family/spouse/other reasons	4	8.9	1	2.2

Source. Human Resource Administrator Survey.
Note. LEA refers to Local Educational Agency. There were 45 charter school respondents. Respondents selected the three destinations that were the most common for their job leavers.

For other special education professionals, the most common destinations for leavers were returning to school (15.6 percent), a position outside of education (13.3 percent), and a special education position in another district (11.1 percent).

Barriers to Hiring Special Education Personnel

In order to identify some of the factors preventing administrators from fully staffing their special education positions, we developed a list of potential barriers to hiring and asked charter school directors (completing the *human resource administrator* survey) to identify the three that were the most critical for them. Almost three-fourths of the respondents indicated that insufficient candidates with the required certification or licensure, and better overall compensation in other school districts, were the most critical barriers to hiring special education teachers in their schools (Table 9.4). Almost two-thirds of the charter school directors also indicated that low salary levels, in particular, were a barrier to hiring. These barriers are consistent with the results addressing the destinations of special education teachers who leave their job—a large proportion leave for a position in another school district. It is possible that compensation provided in other districts is one of the factors attracting these leavers.

Similar to the barriers to hiring teachers, the most critical barriers to hiring other special education personnel were compensation and the lack of qualified candidates. About half of the charter school directors indicated that overall compensation, and low salaries in particular, were the most common barriers to hiring other professionals. Slightly more than one-third of the respondents indicated that insufficient candidates with required certification or licensure was a common barrier. These barriers also appear to be consistent with typical destinations of leavers reported by charter school directors.

Table 9.4. Charter Schools: Administrator Assessments of Most Common Barriers to Hiring Special Education Personnel

Barrier to Hiring	Schools Reporting Barrier for Teachers		Schools Reporting Barrier for Other Professionals	
	Number	Percent	Number	Percent
Insufficient candidates with required certification or licensure	8	72.7	4	36.4
Better salary/ benefits/ incentives available in other school districts	8	72.7	5	45.5
Salary levels are too low	7	63.6	6	54.5
Insufficient stipends or supplements	8	27.3	2	18.2
Geographic location of the district	2	18.2	2	18.2
Demands of the job (e.g., caseloads, personal safety issues, etc.)	1	9.1		
Better salary/ benefits/ incentives available in private agencies, hospitals, etc.	2	18.2	2	18.2
Timing of job openings (too late in school year)	1	9.1	1	9.1
Benefit levels are too low	2	18.2	3	27.3
Characteristics of the district (accountability rating, reputation)	2	18.2	2	18.2
Condition of school and classroom facilities	1	9.1	1	9.1

Source. Human Resource Administrator Survey.
Note. Data is presented for respondents who reported having difficulty hiring special education teachers or professionals. For charter schools, 11 respondents (out of a total of 45) indicated their school or SSA was currently having difficulty hiring. Respondents selected the three destinations that were the most common for their job leavers.

Recruitment of Special Education Personnel

In order to identify recruitment strategies that were useful in staffing special education positions, we first developed a list of 18 strategies that have been used or recommended for use by human resource managers or education administrators. We asked charter school directors (completing the *human resource administrator* survey) to indicate the degree to which each strategy was being used in their school to recruit special education teachers, and other special education professionals. In addition, we asked these directors to rate the effectiveness of each strategy based on their own experience.

Teachers

There were four strategies that were used by two-thirds to three-fourths of the charter schools in recruiting special education teachers (Table 9.5). These four most popular strategies included:

- Contacting personnel in other Texas schools and agencies (76.9 percent),
- Contacting in-state colleges and universities (67.6 percent),
- Posting positions on the Internet (64.1 percent), and
- Increasing marketing efforts to attract bilingual candidates (62.2 percent).

Table 9.5. Use and Effectiveness rating of Key Recruitment Strategies for Special Education Personnel in Charter Schools

Recruitment Strategy	Teachers		Other Professionals	
	Percent Using	Mean Rating	Percent Using	Mean Rating
Post positions on the Internet (through websites sponsored by district, Education Service Center, national educational associations, etc.)	64.1	3.1	53.1	3.3
Attend or sponsor job fairs	47.2	2.8	41.9	2.8
Provide supplements, stipends, or signing bonuses for special education positions	35.1	2.6	34.4	3.0
Provide attractive benefit packages (for example, district-supported child care facilities, flexible spending accounts, comprehensive health care benefits, etc.)	40.5	2.6	34.4	2.8
Contact in-state colleges and universities	67.6	2.3	51.5	2.9
Streamline the hiring process	48.8	2.8	38.7	2.8
Offer financial incentives for personnel to become certified or credentialed in special education	52.6	3.1	40.6	2.8
Send special education personnel on recruiting trips (e.g., to job fairs and universities)	19.4	2.0	25.0	2.7
Contact personnel in other Texas schools and agencies	76.9	2.8	71.9	2.9
Promote business partnerships to support new employees (for example, home mortgage assistance, free banking, etc.)	8.3	2.3	13.3	3.0
Target retired special education personnel	44.4	2.3	46.9	2.6
Increase marketing efforts to attract minority candidates	50.0	2.5	32.1	3.2
Contact state credentialing/licensing agencies, and educational associations	45.9	2.8	53.3	2.5
Increase marketing efforts to attract bilingual special education personnel	62.2	2.7	38.7	3.0
Contact out-of-state colleges and universities	13.9	2.8	20.0	2.0
Advertise in national educational publications	27.8	2.6	22.6	3.0
Market to nontraditional groups (e.g., military, retirees from other industries, etc.)	20.0	2.0	23.3	2.2
Increase marketing efforts to attract special education personnel not currently working (e.g., retired personnel, personnel at home caring for family)	41.7	2.0	40.0	2.5

Source. Human Resource Administrator Survey.

Note. Percentage represents districts that reported using strategy a small extent, moderate extent, or great extent (i.e., ratings 2, 3, or 4). Use and effectiveness were both rated on 4-point scale: 1=*not at all*, 2= *small extent*, 3= *moderate extent*, 4= *great extent*. For teacher positions, total responses for use items varied from 35 to 39, and responses for effectiveness items varied from 3 to 25. For other professional positions, total responses for use items varied from 30 to 33), and total responses for effectiveness items varied from 3 to 21.

Almost half of the respondents used the following recruitment strategies: offering financial incentives to become certified or credentialed in special education, increasing marketing efforts to attract minority group members, attending or sponsoring job fairs, streamlining the hiring process, and contacting state credentialing and licensing agencies and educational associations.

Average effectiveness ratings for the strategies, relative to recruiting special education teachers, ranged from 2.0 to 3.1 on the 4-point rating scale (1=*not at all effective*, 2=*effective to a small extent*, 3=*effective to a moderate extent*, 4=*effective to a great extent*). Interestingly, the majority of strategies were rated as moderately effective. Recruitment strategies charter school directors rated as most effective in attracting and hiring qualified special education teachers were the following:

- Posting positions on the Internet;
- Offering financial incentives for personnel to become certified or credentialed in special education;
- Contacting personnel in other Texas schools and agencies;
- Contacting state credentialing and licensing agencies, and educational associations;
- Contacting out-of-state colleges and universities;
- Streamlining the hiring process; and
- Attending or sponsoring job fairs.

Other Special Education Professionals

Charter schools appeared to use a limited number of recruitment strategies to attract and hire other special education professionals (Table 9.5). Almost three-fourths of charter schools relied on the following strategy:

- Contacting personnel in other Texas schools and agencies (71.9 percent).

About half of the schools used these following recruitment strategies:

- Contacting state credentialing and licensing agencies, and educational associations (53.3 percent);
- Posting positions on the Internet (53.1 percent);
- Contacting in-state colleges and universities (51.5 percent); and
- Targeting retired special education personnel (46.9 percent).

Average effectiveness ratings for the strategies, relative to recruiting other special education professionals, ranged from 2.2 to 3.3 on the 4-point rating scale (1=*not at all effective*, 2=*effective to a small extent*, 3=*effective to a moderate extent*, 4=*effective to a great extent*). However, almost all of the strategies were rated as moderately effective. Only one strategy—marketing to nontraditional groups such as military, retirees from other industries, etc.—was rated as less effective.

Recruitment strategies for other professionals that were rated the highest overall by charter school directors were the following:

- Posting positions on the Internet;
- Increasing marketing efforts to attract minority candidates;
- Advertising in national educational publications;
- Providing supplements, stipends, or signing bonuses for special education positions; and
- Promoting business partnerships to support new employees, for example, home mortgage assistance and free banking.

The one recruitment strategy that was rated as minimally effective for recruiting other special education professionals was marketing to nontraditional groups such as military and other retirees.

Staffing Strategies for Personnel Shortages

We were interested in the degree to which administrators employed a variety of staffing strategies to reduce existing or avoid future staffing shortages in the different special education personnel positions. We asked *special education administrators* in charter schools to rate the degree to which their school used 14 different staffing strategies. We have reported the proportion of administrators who indicated they used the strategy to any extent.

Teachers

Many of the strategies for staffing special education teacher positions were used by about half of the charter schools (Table 9.6). The most popular strategy for staffing teacher positions, used by 61.2 percent of charter school respondents was the following:

- Contract for fully certified personnel.

Other staffing strategies used by many of the charter schools included the following:

- Blend funding to create inclusive settings,
- Increase class size or case load,
- Hire more special education paraprofessionals,
- Allow job sharing,
- Use interns from alternative certification programs, and
- Hire retired special educators.

Table 9.6. Charter School Staffing Strategies Used to Address Special Education Personnel Shortages

Staffing Strategy	Percent of Schools Using Strategy for Teachers	Percent of Schools Using Strategy for Other Professionals
Hire more special education paraprofessionals	51.7	44.4
Increase class size or case load	53.3	34.6
Blend funding to create inclusive settings	55.2	44.0
Hire retired special educators	48.3	55.6
Use interns from alternative certification programs	50.0	33.3
Use long-term certified substitutes	26.7	18.5
Hire personnel on temporary certificates	48.3	37.0
Consolidate instructional arrangements	56.7	42.3
Contract for fully certified personnel	62.1	77.8
Allow job sharing	50.0	55.6
Share service arrangements with other districts	23.3	29.6
Send students to districts where services are available	23.3	22.2
Use staff from education service centers	39.3	55.6
Use long-term uncertified substitutes	16.7	11.1

Source. Special Education Administrator Survey.
Note. Percentage represents districts that used the strategy to a small, moderate, or great extent (extent of use ratings 2, 3, or 4). Items were rated on a 4-point scale: 1=*used not at all,* 2= *used to a small extent,* 3= *used to a moderate extent,* 4= *used to a great extent*. Total responses for teacher staffing questionnaire items varied from 28 to 30; responses for other professionals staffing items ranged from 25 to 27.

Other Special Education Professionals

The strategy employed by the greatest proportion of charter school directors in addressing shortages of other special education professionals was the following:

- Contracting for fully certified personnel.

This strategy was employed by 77.8 percent of charter schools. There were three additional strategies that were commonly used; these three were used by slightly more than half of the charter schools:

- Hiring retired special educators,
- Allowing job sharing, and
- Using staff from education service centers.

Retention Issues for Special Education Personnel

We investigated a number of factors that might affect the retention of special education personnel. Through a review of the literature describing turnover, generally, and teacher turnover, in particular, we developed a list of 26 job-related work conditions that were potential barriers to retaining special education personnel. We asked *special education administrators* in charter schools, or charter school directors in schools without special education administrators, to indicate the extent to which these were retention barriers for their special education teachers and other professionals. We also developed a list of 14 compensation-related work conditions that were potential barriers to special education personnel

retention. We asked charter school directors to respond to our *human resource administrator* survey, and indicate the extent to which these compensation factors were potential barriers to staff retention. We have reported below the proportion of charter schools that indicated a work condition was a barrier to any extent.

Job-Related Work Conditions

Special Education Teachers. All of the job-related work conditions were perceived by administrators, who were completing our *special education administrator* survey, to be retention barriers to some extent for special education teachers (Table 9.7). However, there were seven aspects of the job environment that were identified as barriers by approximately half or more of the charter schools. The most common retention barriers were:

- Job stress due to the conflicting demands of the job and to work overload (69.0 percent),
- Overwhelming amount of requisite paperwork (67.9 percent), and
- The legal complexities of working in special education (67.9 percent).

The other common barriers for retaining teachers were rated as barriers by a little more than half of the respondents. These barriers included the following:

- Inadequate support from parents of special education students (56.7 percent),
- Inadequate support from general education coworkers (56.7 percent),
- Insufficient time for non-teaching responsibilities (53.3 percent), and
- Insufficient support from paraprofessionals (50.0 percent).

The work condition that appeared to be the least common barrier to retention for teachers was the safety of the work environment (rated as a barrier by 16.7 percent of respondents).

Other Special Education Professionals. Over half of the administrators completing the *special education administrator* survey reported that the following three work conditions were a barrier to retaining other special education professionals:

- Overwhelming amount of required paperwork (54.2 percent),
- Legal complexities of working in special education (53.8 percent), and
- Job stress due to conflicting demands of the job and work overload (53.8 percent).

The remaining work conditions were rated as retention barriers to some extent by about 20 to 40 percent of the respondents.

Table 9.7. Job-Related Work Conditions as Potential Barriers to Retaining Special Education Personnel in Charter Schools

Job-Related Work Condition	Schools Reporting Barrier for Teachers		Schools Reporting Barrier for Other Professionals	
	Number	Percent	Number	Percent
Inadequate instructional resources and teaching materials	14	46.7	7	26.9
Lack of reliable access to technology	11	36.7	7	26.9
Insufficient support from paraprofessionals	15	50.0	9	34.6
Inadequate support of discipline policies by school administration	10	33.3	7	26.9
Unsafe school/classroom	5	16.7	5	19.2
Insufficient time for non-teaching responsibilities	16	53.3	8	30.8
Inadequate district administration support for special education	10	33.3	8	30.8
Inadequate school administration support for special education	10	33.3	9	34.6
Inadequate support from general education coworkers	17	56.7	11	42.3
Inadequate support from parents of special education students	17	56.7	10	38.5
Insufficient feedback regarding special education (i.e., measurements of student progress, informative teaching evaluations)	12	42.9	8	30.8
Poor fit of personnel with special education work team	12	42.9	6	23.1
Feelings of professional isolation of special education personnel	12	42.9	10	40.0
Inadequate pre-service training of new personnel	13	46.4	10	40.0
Inadequate in-service training for new personnel	11	39.3	9	36.0
Inadequate professional development for experienced personnel	11	37.9	10	40.0
Insufficient prior experience working with particular disabilities	12	42.9	8	32.0
Inadequate training in core content subject areas	12	42.9	8	32.0
Multiple-campus assignments for special education personnel	8	28.6	7	28.0
Excessive case loads/class size	13	44.8	8	32.0
Overwhelming amount of required paperwork	19	67.9	13	54.2
Legal complexities of working in special education	19	67.9	14	53.8
Job stress due to conflicting demands of the job and work overload	20	69.0	14	53.8
Attractiveness of administrative positions relative to special education assignments	7	25.0	6	23.1
Lack of commitment to special education profession	9	32.1	5	19.2
Dissatisfaction with the assignment	7	26.9	6	23.1

Source. Special Education Administrator Survey.

Note. Percentage represents districts that reported work condition as a barrier to a small extent, moderate extent, or great extent (i.e., ratings 2, 3, or 4). Ratings were on a 4-point scale: 1=*not at all a barrier*, 2=*barrier to a small extent*, 3=*barrier to a moderate extent*, 4=*barrier to a great extent*. For teachers, charter school responses for each questionnaire item varied from 26 to 30. For other professionals, charter school responses varied from 24 to 26.

Compensation-Related Work Conditions

Special education teachers. The overwhelming compensation-related work condition that charter school directors (completing the *human resource administrator* survey) rated as a barrier to retaining special education teachers was the following (Table 9.8):

- Lower salary and benefits relative to that offered in other districts (80.0 percent).

This is consistent with the results reported for the traditional school districts—human resource administrators perceived competition from other school districts as a major barrier to retaining special education teachers. There were four additional compensation-related factors that appeared to be important retention barriers for charter school teachers. Specifically, about two-thirds of the charter school directors rated the following work conditions as barriers:

- Inadequate financial rewards for superior performance of special education personnel (69.2 percent),
- Lower compensation related to fields outside education (66.7 percent),
- Inadequate stipends and supplements for special education assignments (66.7 percent),
- Inadequate financial rewards for school-wide superior performance (65.8 percent).

The least likely factor influencing teacher retention was the geographic location of the school— one-fourth of the charter school directors indicated that this was a barrier to retention. However, commute time to work was considered a barrier by almost half of the respondents.

Other special education professionals. Somewhat more than half of the charter school directors indicated that the following work conditions were barriers to retaining other special education personnel:

- Lower salary and benefits relative to those available in other school districts (61.3 percent),
- Lower salary and benefits relative to fields outside education (61.3 percent),
- Inadequate financial rewards for special education personnel superior performance (61.3 percent),
- Inadequate stipends or supplements for special education assignments (54.8 percent), and
- Inadequate financial rewards for school superior performance (54.8 percent).

The remainder of the compensation-related work conditions were reported as barriers to retention by one-third or more of the respondents, except for geographic location and commute time to work. These two work conditions appear to be less likely than any of the others to affect retention of other special education professionals in charter schools.

Table 9.8. Compensation-Related Work Conditions as Potential Barriers to Retaining Special Education Personnel in Charter Schools

Work Condition	Schools Reporting Barrier for Teachers		Schools Reporting Barriers for Other Professionals	
	Number	Percent	Number	Percent
Lower salary/ benefits relative to that available in other LEAs	32	80.0	19	61.3
Lower salary/ benefits relative to fields outside education	26	66.7	19	61.3
Inadequate stipends/ supplements for special education assignments	26	66.7	17	54.8
Inadequate financial rewards for school superior performance	25	65.8	17	54.8
Inadequate financial rewards for special education personnel superior performance	27	69.2	19	61.3
Insufficient financial incentives for additional non-teaching responsibilities	19	50.0	12	40.0
Inadequate financial support for professional development activities, college coursework, etc.	20	51.3	15	48.4
Inadequate release time for professional development activities, college coursework, etc.	19	48.7	15	48.4
Limited career paths for teachers to move into master teacher, mentor teacher, or other teacher leadership positions	21	53.8	14	45.2
Inability of out-of-state personnel to pass Texas certification tests and/or other requirements	17	43.6	11	35.5
Inability of in-state personnel on temporary certificates to pass Texas certification tests and/or requirements	21	55.3	12	38.7
Geographic location of the district (e.g., rural, etc.)	10	25.6	7	22.6
Commute time to work (e.g., too long, etc.)	18	46.2	12	10.0
Condition of school facilities (e.g., older, etc.)	18	47.4	13	41.9

Source. Human Resource Administrator Survey.
Note. Percentage represents districts that reported work condition as a barrier to a small extent, moderate extent, or great extent (i.e., ratings 2, 3, or 4). Ratings were on a 4-point scale: 1=*not at all a barrier*, 2=*barrier to a small extent*, 3=*barrier to a moderate extent*, 4=*barrier to a great extent*. For charter schools, total responses for each teacher items varied from 38 to 40; responses for other professionals items varied from 30 to 31.

Use and Effectiveness of Retention Strategies

There were eight retention strategies employed by three-fourths or more of the special *education administrators* at charter schools (Table 9.9). The remainder of the strategies were used by approximately one-third or more of the respondents. Thus it appears that charter schools relied on a variety of strategies to retain special education personnel. The strategy used by the greatest proportion of charter schools was the following:

- Providing adequate access to instructional resources and teaching materials (93.1 percent).

The other most commonly used retention strategies included providing:

- Financial support for professional development (86.2 percent),
- Collaborative planning time for special education within the regular schedule (84.0 percent),

- Access to reliable computer technology to assist with paperwork (82.8 percent),
- Support regarding legal issues (79.3 percent),
- Release time for professional development (78.6 percent),
- Opportunities for special education personnel within the charter school district to discuss common issues (76.0 percent), and
- Adequate classroom space and equipment (72.4 percent).

All of the retention strategies were rated as moderately effective by the administrators responding to the *special education administrator* survey. The range of ratings for the strategies, rated on a 4-point scale (1=*not at all,* 2=*small extent,* 3=*moderate extent,* 4=*great extent*), was 2.6 to 3.2. Thus charter schools appear to be relying on a broad constellation of effective strategies to retain their special education personnel.

Table 9.9. Charter School Retention Strategies for Special Education Personnel

Retention Strategies	Charter Schools	
	Percent Using	Mean Rating
Adequate access to instructional resources and teaching materials	93.1	3.0
Release time for professional development	78.6	3.2
Financial support for professional development	86.2	3.0
Adequate classroom space and equipment	72.4	3.3
Access to reliable computer technology to assist with paperwork	82.8	3.1
Adequate support from paraprofessionals	66.7	2.8
Support regarding legal issues	79.3	3.0
Clerical support to assist with paperwork	60.7	3.1
Opportunities for special education personnel in district to discuss common issues	76.0	2.9
Mentoring programs for new special education personnel	57.1	3.2
Informative (rather than evaluative) feedback regarding teaching	65.5	3.0
Collaborative planning time for special education within regular schedule	84.0	2.8
Financial incentives to compensate for additional non-teaching responsibilities	51.9	2.6
Release time, or reduced case loads/class sizes, additional non-teaching responsibilities	53.8	2.9
Financial incentives for completing additional state certif. tests, college courses, advanced degrees, and/or professional devel. activities	46.4	2.9
Funds for merit pay for special educators	29.6	3.0
Peer coaching for experienced special education personnel	44.4	3.0
Extra planning time for special education within regular schedule	65.4	2.9
Career path opportunities for leadership positions	55.6	2.9
Fund bonuses for all faculty and staff in schools that meet certain performance criteria	40.7	3.0

Source. Special Education Administrator Survey.
Note. Percentage represents districts that reported using strategy to a small extent, moderate extent, or great extent (i.e., ratings 2, 3, or 4). Use and effectiveness were each rated on a 4-point scale: 1=*not at all,* 2=*small extent,* 3=*moderate extent,* 4=*great extent*. For charter schools, total responses for use items varied from 25 to 29; total responses for effectiveness ratings ranged from 5 to 20.

Summary and Conclusions

Positions and Shortages

Over half of the special education FTE positions staffed by charter schools were for special education teachers (60.4 percent). About one-fourth of the positions were for other professionals (24.8 percent), and the remaining positions were allocated for special education paraprofessionals (15.2 percent).

There appear to be two special education positions in charter schools that are experiencing critical shortages: teachers who work with students in resource and/or content mastery, and licensed specialists in school psychology. However, the large vacancy rates for many of the positions suggest that a large proportion of special education positions were unstaffed at the time of the current study. These results indicate that in general, charter schools are experiencing difficulty staffing special education positions.

Special education administrators and human resource administrators reported that more attractive compensation from competing school districts and other organizations made recruitment and retention of personnel difficult. However, the retention challenge is exacerbated by work conditions characterized by understaffing of special education positions. Under these circumstances, teachers and other professionals working in charter schools may have a heavier case or class load, and a greater paperwork burden associated with the additional students they are serving. Thus, they may be easily attracted to other special education positions promising better compensation and a somewhat lighter workload. This situation demonstrates the importance of providing more competitive compensation packages to attract qualified candidates—or candidates who can become qualified with the school's support—and thus achieve fully staffed personnel levels in special education departments.

Recruitment Strategies

Charter schools reported using a variety of strategies to recruit special education teachers. Based on their ratings of the effectiveness of the strategies, several strategies appear to have potential for recruiting qualified candidates. Some of the strategies were already being used by a large proportion of respondents. However, charter schools may increase their chances of attracting more candidates by implementing or expanding the following strategies: offering financial incentives for personnel to become certified or credentialed in special education; contacting state credentialing and licensing agencies, and educational associations; contacting out-of-state colleges and universities; streamlining the hiring process; and attending or sponsoring job fairs.

Almost all of the recruitment strategies were perceived as effective for attracting other special education professionals. Thus charter schools may benefit greatly from the addition of any of the strategies to their recruitment plans for other professionals. The greatest benefit may come from concentrating on the following strategies, since these were rated the most effective, and were being used least by charter schools: increasing marketing efforts to attract minority candidates; advertising in national educational publications; providing supplements, stipends, or signing bonuses for special education positions; and promoting business partnerships to support new employees, for example, home mortgage assistance and free banking.

Staffing Strategies

The strategy for addressing teacher shortages that was used most by charter schools was contracting for fully certified personnel. In general, the most popular strategies were used by about half of the charter schools. This suggests that most charter schools were likely using a subset of the strategies. It is possible

that using a wider complement of approaches to staffing would be an effective approach to achieving fully staffed positions. For example, charter schools may wish to expand the use of special education paraprofessionals to support special education teachers in non-instructional areas, use interns from alternative certification programs, and allow job sharing.

Contracting for fully certified personnel was also the most-used staffing strategy for shortages in other professional positions. There was a broader range in the degree to which charter schools used the various staffing strategies for other professionals. Charter schools may benefit from implementing one of the following strategies not already being utilized: hiring retired special educators, or allowing job sharing.

For future research, it would be helpful to investigate administrators' views of the degree to which each of the staffing strategies was successful in addressing the various special education personnel shortages.

Retention of Special Education Personnel

For both special education teachers and other professionals, the most common retention barriers were job stress due to role conflict and to work overload, an overwhelming amount of requisite paperwork, and the legal complexities of working in special education. All of the potential retention strategies investigated in this study were considered effective by the charter school special education administrators.

From the results of this study, additional support from paraprofessionals may be especially useful for retaining teachers. These personnel may assist with non-instructional responsibilities.

It was surprising to note that the inadequacy of instructional materials was considered a barrier to retention for almost half of the respondents. Special education administrators reported that addressing this issue was an effective retention strategy for special education personnel. For charter schools, the lack of instructional materials may refer to basic supplies such as paper and pencils. Supporting teachers with these materials may be critical to retention. Secondarily, the instructional materials may refer to more general teaching materials such as textbooks and supplemental resources. Since relatively few administrators perceived there to be a lack of access to technology, perhaps special education teachers in charter schools could be offered professional development in the use of technology to access new instructional materials and resources. Cooperative arrangements with other school districts and community libraries might facilitate access to Internet-based teaching resources. This might increase teachers' access to the more general teaching materials they may be lacking.

While the charter schools appeared to be employing a variety of effective retention strategies, the turnover of special education personnel was still considerably larger in charter schools than in traditional schools, particularly for teachers. Two results concerning special education teachers appear to suggest that the most important issue for charter schools is competition from other school districts. First, for teachers who left the schools, the most likely work destination was to take a similar position in another school district. Second, one of the top two recruitment barriers for this employee group was better overall compensation in other districts. It is also possible that the other top recruitment barrier—insufficient qualified candidates—exacerbates this because those teachers who are qualified may be the ones most likely to be offered positions by other districts. Thus the turnover of the more qualified teachers might be greater than the charter school's overall turnover. This is compelling evidence supporting the need to address the issue of compensation for special education personnel in charter schools .

Charter schools may be able to retain more teachers through achieving more fully staffed special education departments. Sharing the workload among the staff positions allocated to working with special education students may decrease job stress somewhat. This may be an effective retention strategy for other special education professionals as well.

While other special education professionals share the same barriers to retention as teachers, they tend to leave their charter school positions for different destinations—they are more likely to return to school. Thus, the notion of "growing your own"—paying for personnel to complete additional education and certifications, in school psychology, for example—may be a useful strategy for charter schools. While these personnel may eventually leave for higher paying jobs, the charter school would benefit from staff members' extended tenure—at least while these individuals are continuing their education. The school would benefit even more if the individual pursues certification or licensure in an area where the school is experiencing a staffing shortage, and remains at the school for a period after completing the educational program.

10. Policy Implications and Recommendations

This section describes the general findings of the current study in terms of their implications for policy making, and the approaches that may be useful in addressing the challenges and opportunities that have been identified.

Policy Implications

For leaders crafting special education policy at the state level, there are several patterns among special education personnel that merit attention. These overarching themes include the following:

- The most critical shortages appear to be for special education teachers working with students in resource or content mastery, and potentially for teachers working with students who have adaptive behavior issues. Substantial proportions of special education teachers who provide basic instruction in a core subject at the elementary or secondary level appear to be highly qualified. The ability of districts to staff special education teaching positions in resource and content mastery will directly impact the degree to which districts can continue to meet the highly qualified criteria required by the Individuals with Disabilities Education Improvement Act of 2004.
- Speech language pathologists and educational diagnosticians continue to be in short supply. As the number of Spanish-speaking students, and students with Asian backgrounds, increase in Texas schools, the need for bilingual specialists will become more critical. Without adequate testing and support, many limited English speaking children may be misdiagnosed, or not identified for needed special education services.
- More than one-third of all special education positions in Texas public schools appear to be paraprofessionals. This represents a large number of personnel statewide who are available to support special education, however, they have limited skills relative to special education teachers and other special education professionals. Given the number of vacant professional positions, and turnover, it will be a challenge for districts to provide paraprofessionals with the supervision they require, and a workload commensurate with their training and expertise.
- Special education teachers and other special education professionals appear to be highly educated and to have extensive experience in their fields. Special education teachers typically have many years classroom experience, as do a considerable number of the educational diagnosticians and other special education professionals. Given the proportions of special education teachers and other special education professionals that are leaving for jobs outside education and for retirement, there will be increasing challenges to staffing their positions with equally highly qualified teachers, and with other special education professionals who have the requisite expertise. However, this provides an opportunity to solicit the diversity among new hires that will sustain the special education field over the long term.
- Both special education teachers and other special education professionals devoted many hours per month to tasks other than providing direct services to students. For other special education professionals, it appears that more work hours are spent on paperwork such as developing IEPs (Individualized Education Programs), ARD (Admission, Review, and Dismissal) committee work, and other administrative tasks than on providing direct services to students. This directly impacts the service level for special education students. It may also affect the degree to which other special education professionals derive satisfaction from their work, thereby contributing to

personnel turnover. Decreasing the record keeping and paperwork burden for both teachers and other professionals in special education is imperative.

- While turnover among special education teachers is comparable to turnover for all Texas school teachers, there is great variation among turnover rates among districts. The turnover rates for personnel in different positions may also vary widely. Recruitment, staffing, and retention strategies must be devised so local administrators have adequate resources and latitude to address the specific needs of critical special education positions that must be filled.
- Special education teachers are most likely to be working with students who have a specific learning disability. In fact, over half of the students with whom special education teachers work were reported to have a specific learning disability as their primary disability. With so many students needing support in this area, it is vital to pursue new ways of teaching and learning that work for today's children.
- Special education personnel reportedly completed four weeks or more of professional development during the previous two years. However, they continue to desire additional training, due to the changing landscape of their professions, and the burgeoning legal environment of special education. Professional development appears to be a critical component of ensuring the highly qualified workforce needed in special education.

Recommendations for District Leaders

District administrators and other leaders must address each of these patterns that characterize their special education workforce. Recommendations for addressing critical personnel shortages include the following:

- **Commit to filling all special education positions.** Administrators and other leaders should: actively seek qualified minority group candidates, and bilingual candidates; use funding and release time to support staff members in other positions as they pursue relevant education and certifications in special education; and consider assisting special education paraprofessionals who might be interested in a career as special education teachers. Administrators and other leaders should also provide funding and release time for speech language pathologists, educational diagnosticians, and licensed specialists in school psychology to learn a second language that is needed in the district. Retired special educators should be employed until permanent staff can be hired.
- **Commit to high quality human resources management.** Administrators and other leaders should use a broader range of recruitment strategies for special education positions. Where districts are using multiple strategies, the focus should be on those that appear to be the most effective at attracting qualified candidates for the particular positions being filled. Administrators should also use special education personnel as recruiters, along with more structured employment interviews, in order to better match qualified candidates with the job and with the campus and district environments; and provide salary and benefit packages comparable to the districts and organizations that are the key competitors for special education teachers and other special education professionals. If salary and benefits cannot be provided at a comparable level, provide personnel with more choices in workload, work arrangements, or other aspects of the job to compensate for lower financial remuneration.
- **Commit to retaining qualified special education personnel.** While many retention strategies are being used in Texas public schools, most are reported to be moderately effective at best. It is possible that retention strategies that are more tailored to the special education position and personnel will be more effective than simply using a variety of approaches and hoping one will be successful. Special education teachers and other special education professionals appear to be

generally satisfied with their jobs, and view their work environment as supportive. However, district and campus administrators have the potential to greatly increase employee job satisfaction, and decrease turnover, by improving the climate in the areas of (a) supervision and leadership, (b) instructional resources and materials, and (b) opportunities to work directly with special education students and to see their growth and progress.

In summary, the current study identified several critical shortage areas for special education positions in Texas public schools. In addition, the survey of teachers and other professionals provided increased information regarding the quality and potential tenure of this workforce. The findings suggest that districts must commit to filling special education positions, and focus their efforts on those recruiting, staffing, and retention strategies that will be most effective for the specific positions being filled. Policy makers must commit to supporting these efforts, as well as decreasing the burden of special education paperwork on teachers and other special education professionals, providing districts and campuses with flexibility in retention approaches, and exploring alternative instructional methods for students with learning disabilities.

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