



# Texas Study of **Personnel Needs in Special Education**

*Executive Summary*

**May 2006**

Prepared for

***Region 4 Education Service Center***

and the

***Texas Education Agency***

Prepared by

***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 (CSPD) Leadership Council meet provisions of the Individuals with Disabilities Education Act (IDEA, 2004).

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## Executive Summary

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### 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, 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; Stempin & 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.

### 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?

## **Methodology**

The current study explored special education personnel issues from multiple perspectives. First, researchers surveyed human resource administrators and special education administrators in Texas public schools to gain an understanding of personnel shortages and human resource management issues at the organizational level. Researchers also surveyed a random sample of full-time special education teachers and other special education professionals (e.g., teachers and others who provide direct services for students) to gauge the quality of special education personnel and to explore factors affecting employee retention. The instruments were mailed to survey participants along with postage-paid return envelopes.

Additionally, the current study accounted 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.

Overall, the administrators, special education teachers, and other special education professionals responding to our surveys appeared to represent districts throughout Texas public schools in terms of location, size, and demographic composition of the student population. They also appeared to be representative of special education personnel, generally. However, statewide staffing levels, vacancies, and other characteristics inferred from the current study are only estimates. They are based on the data provided by those districts that responded to our survey. 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.

## **Special Education Personnel Staffing Needs**

In order to estimate statewide staffing levels, we looked at the degree to which respondent districts represented districts surveyed in terms of total student enrollment. There were 470 administrators who responded to our *human resource administrator* survey (40.2 percent response rate). Single district respondents represented 34 percent of all single district enrollment; SSA participant district respondents represented 40 percent of all SSA participant districts; and SSA respondents represented 32 percent of SSA enrollment. We used these proportions to weight reported special education teacher and professional full-time equivalent (FTE) positions and vacancies (Table 1). Our estimates may underrepresent actual positions and vacancies due to a number of factors, particularly (a) data for two districts were not available in AEIS, and (b) some respondents indicated their district funded various positions, however,

they did not report the number of positions funded. (Respondent data are reported separately for single districts, SSA participant districts, and SSAs in Appendix A. Charter school data are reported in a separate section of this executive summary.)

## **Critical Shortage Areas**

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.

## **Types of Positions**

We estimate that there were 69,667 positions in special education in Texas public schools (excluding charter schools and alternative education programs) 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 special education positions—77 percent, while SSA participant districts directly hired personnel for about 17 percent of the positions, and SSAs were responsible for about 6 percent. 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**

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—about 14 percent. However, turnover rates for individual districts range greatly, and it is possible that there are different turnover rates for the various teacher and other professional positions. This may be an area for future research.

Administrators responding to our *human resource administrator* survey 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.

**Table 1. Statewide Estimates of Special Education Positions and Vacancy Rates**

| Position  | Total FTE<br>Estimated | Total<br>Vacancy<br>FTE<br>Estimated | Estimated<br>Vacancy<br>Rate (%) |
|---|------------------------|--------------------------------------|----------------------------------|
| <b>Special Education Teachers Working Primarily with:</b>                     |                        |                                      |                                  |
| 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                              |
| <b>Totals</b>   | <b>32,546</b>          | <b>1,316</b>                         | <b>4.0</b>                       |
| <b>Other Special Education Professionals</b>                                  |                        |                                      |                                  |
| 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                              |
| <b>Totals</b>   | <b>11,617</b>          | <b>881</b>                           | <b>7.6</b>                       |
| <b>Special Education Paraprofessionals</b>                                    |                        |                                      |                                  |
| <b>Totals</b>   | <b>25,677</b>          | <b>810</b>                           | <b>3.2</b>                       |

*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. Estimates are based on responses from traditional districts, SSA participant districts, and SSAs; estimates for charter schools and alternative education programs are not included.



## Hiring Special Education Personnel

### Barriers to Hiring

There were three major barriers to hiring both teachers and other professionals reported by administrators responding to our *human resource administrator* survey:

- 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 a dedicated, creative strategy.

### Recruitment Strategies

**Teachers.** The majority of single district, SSA participant district, and SSA administrators responding to our *human resource administrator* survey 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; and
- 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 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.

**Other professionals.** For other special education 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 only 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 fewer of the SSA participant districts. For these districts, a small expansion of their recruitment efforts in 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**

There were 252 administrators from single districts and SSAs who responded to our *special education administrator* survey (53.1 percent response rate).

**Teachers.** *Special education administrators* reported that they relied heavily on the following strategy for staffing teacher positions:

- Hiring paraprofessionals.

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.

**Other professionals.** 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.

## Retaining Special Education Teachers and Other Professionals

### Barriers to Retention

**Teachers.** For *special education administrators* in 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 in some districts. 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.

**Other professionals.** 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.

To address 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 district and SSA *special education administrators* 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.

## **Special Education Teachers**

We surveyed 7,821 special education teachers in single districts, and 1,370 in SSAs. Survey respondents included 1,530 teachers in single districts (19.6 percent response rate), and 359 in SSAs (26.2 percent response rate). Respondents appeared to be representative of special education teaching personnel in Texas public schools, and thus we believe the results of the current study may be generalized to special education teachers throughout Texas schools.

### **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. The most likely duration of their mentoring program was between 6 and 20 hours. 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.

Two-thirds or more of special education teacher respondents hold a lifetime teaching Texas teaching certificate, or both lifetime and standard certificates, and are certified in special education. About 3 percent of respondents indicated they held one or more temporary, probationary, or emergency teaching certifications or permits. More than 80 percent of teacher respondents indicated they held a Texas teaching certificate for grade levels from early childhood through grade 12. Other respondents held supplemental or other special education teaching certifications.

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.

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 have 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 teach a core academic 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), and 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 was supportive.** On average, they agreed that their school climate provided 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. 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 were applied consistently at their school, and they expressed moderate disagreement that they had clerical support to assist with paperwork duties.

While special education teachers reported agreement with the aspects of a positive school climate, their average level of agreement fell closer to the middle of the rating scale. Thus, teachers' ratings of their work conditions did not appear to 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.

**Pay incentives were available in many districts.** 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.

**Overall, about two-thirds of special education teachers were satisfied with their jobs.** Consistent with this, about one-third of all special education teachers indicated they were planning to leave the job the following year. Novice teachers were somewhat more likely than experienced teachers to report they were dissatisfied with their jobs. In addition, slightly more novice teachers in SSAs than in single districts reported they were planning to leave the job.

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.

While the results of the current study indicate that single districts should consider job satisfaction and work conditions for novice teachers in designing retention strategies, it appears to be even more critical for SSAs to address these issues.

## Special Education Teacher Turnover

**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.

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.

## Other Special Education Professionals

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. The average age of other professionals was about 46 years. 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 four 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, the majority of other

professional responding to our survey had completed a master's degree or higher level educational achievement. In fact, 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 were few novices—those with three or fewer years experience in their fields. This included about 12 percent of other professionals in single districts, and about 8 percent of personnel 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. Many other special education professionals reported having teaching experience. About half 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 served 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. Many professionals reported that they worked with students who were older than traditional public school age.

**The largest groups of students served were those with a specific learning disability and those with a speech or language impairment**—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.

Most other special education professionals worked with up to 60 students in a typical week. 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 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.

**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 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 estimates reported above indicating most 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 working. Thus, other professionals may be spending considerably more than 40 hours per week on tasks and responsibilities associated with their job.

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. In fact, more than 10 percent served special education students in four or more districts. More than half of other professionals in single districts, and more than three-fourths in SSAs, traveled to more than one school or campus to participate in ARD or other meetings or to provide direct services to students. In describing the work of other professionals in SSAs, future studies should include travel as a part of the non-direct service responsibilities.

## **Special Education Work Environment**

### **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.

**Pay incentives were available in many districts.** Many districts provided incentive programs that rewarded other special education 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 planned to retire. Other common destinations for special education professionals in the experienced group were an administrative position, job outside education, and a position in an agency or hospital. One-fourth of the novices planned to take a position in an agency or hospital. Other common destinations for novices 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 planned to take a position outside education. Other common destinations included taking a position in another district, taking an administrative position, and retiring.

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 that is important in understanding turnover of other special education professionals is the number of other agencies that 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.

## **Professional Development Needs of Special Education Personnel**

### **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, reported completing almost four weeks of professional development during the previous two years. Teachers in SSAs completed somewhat fewer hours than did teachers in single districts.

For teachers, the greatest number of hours of professional development were spent 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).

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. As noted in an earlier section of this report, 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 lack of expertise.

A large proportion of teachers were 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* reported completing 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 spent the most hours, on average, in the following areas of professional development:

- continuing education to maintain certification (27.5 hours),
- 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).

In SSAs, other professionals also spent considerable time participating in professional development on 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. Other special education professionals felt professional development was somewhat more than moderately effective in the areas of 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 than moderately effective, professional development that addressed 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, these results 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.

## **Special Education Staffing in Charter Schools**

We surveyed 192 charter school directors and 164 special education administrators in charter schools. (We excluded 13 charter schools that were identified solely as alternative education programs.) There were 48 administrators that responded to our *human resource administrator* survey (25.0 percent

response rate), and 31 administrators that responded to our *special education administrator* survey (18.9 percent response rate).

## Critical Shortage Areas

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, 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. (Respondent data for charter schools are presented in Appendix B.)

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.

## Types of Positions

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).

## Recruitment Strategies

**Teachers.** 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.

**Other professionals.** 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 strategies that were most popular among charter school administrators 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 school 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 special education 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 the current 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. 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. Secondly, 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.

## **Turnover**

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 (26 percent for teachers, 19 percent for other professionals). Two results

concerning special education teachers 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.

## **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 teach a core academic 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 non-teaching tasks or 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, and thereby contribute to personnel turnover. Decreasing the record keeping and paperwork burden for both teachers and other special education 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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## **Appendix A**





**Table A1. Staffing Levels in Single Districts**

| Position  | Districts with Position (%) | FTE Positions  | FTE Vacancies | Vacancy Rate (%) |
|---|-----------------------------|----------------|---------------|------------------|
| <b>Special Education Teachers Working Primarily with:</b>                     |                             |                |               |                  |
| Students in resource and/or content mastery                                   | 98.6                        | 4,347.8        | 153.0         | 3.5              |
| Students who have moderate to severe disabilities (i.e., Life Skills classes) | 99.3                        | 1,190.5        | 35.0          | 2.9              |
| Students who have a variety of disabilities (various teacher assignments)     | 46.6                        | 750.9          | 13.0          | 1.7              |
| Students ages 3-5 (i.e., Preschool Program for Children with Disabilities)    | 94.3                        | 674.1          | 16.0          | 2.4              |
| Students who have emotional disturbances (adaptive behavior issues)           | 80.7                        | 614.0          | 55.0          | 9.0              |
| Students who have Limited English Proficiency (i.e., dual certified teachers) | 34.6                        | 381.3          | 8.0           | 2.1              |
| Students who have auditory impairments  | 33.8                        | 204.7          | 13.0          | 6.4              |
| Students in home-based settings   | 54.7                        | 179.0          | 10.0          | 5.6              |
| Students who have visual impairments  | 62.1                        | 148.2          | 4.0           | 2.7              |
| Students who have autism  | 44.6                        | 144.8          | 7.0           | 4.8              |
| <b>Totals</b>   | <b>--</b>                   | <b>8,635.0</b> | <b>314.0</b>  | <b>3.6</b>       |
| <b>Other Special Education Professionals</b>                                  |                             |                |               |                  |
| Educational diagnostician   | 95.0                        | 1,014.2        | 64.9          | 6.4              |
| Bilingual educational diagnostician   | 33.6                        | 122.9          | 6.3           | 5.1              |
| Speech language pathologist, licensed or certified                            | 97.9                        | 1,031.1        | 90.0          | 8.7              |
| Bilingual speech language pathologist, licensed or certified                  | 31.4                        | 85.5           | 16.0          | 18.7             |
| Licensed specialist in school psychology                                      | 64.0                        | 240.0          | 12.0          | 5.0              |
| Bilingual licensed specialist in school psychology                            | 14.7                        | 22.5           | 3.0           | 13.3             |
| Sign language interpreter   | 27.3                        | 181.5          | 15.0          | 8.3              |
| Occupational therapist  | 62.9                        | 158.9          | 7.5           | 4.7              |
| Physical therapist  | 54.3                        | 99.5           | 9.0           | 9.0              |
| Orientation and mobility specialist   | 32.6                        | 48.9           | 1.0           | 2.0              |
| <b>Totals</b>   | <b>--</b>                   | <b>3,004.9</b> | <b>224.6</b>  | <b>7.5</b>       |
| <b>Special Education Paraprofessionals</b>                                    |                             |                |               |                  |
| <b>Totals</b>   | <b>98.6</b>                 | <b>7,077.9</b> | <b>216.5</b>  | <b>3.1</b>       |

Source. Human Resource Administrator Survey.

Note. For districts having positions, total number of respondents providing data for teacher positions varied from 127 to 140; total providing data for professional positions ranged from 137 to 140; total providing data for paraprofessional position was 140. For FTE, total number of respondents providing data for teacher FTE varied from 63 to 133; total providing data for professional positions ranged from 51 to 135; total providing data for paraprofessional position was 126. For vacancy FTE, total number of respondents providing data for teacher FTE vacancies varied from 54 to 100; total providing data for professional positions ranged from 44 to 105; total providing data for paraprofessional position was 93.

**Table A2. Staffing Levels in SSA Participant Districts**

| Position  | Districts with Position (%) | FTE Positions  | FTE Vacancies | Vacancy Rate (%) |
|---|-----------------------------|----------------|---------------|------------------|
| <b>Special Education Teachers Working Primarily with:</b>                     |                             |                |               |                  |
| Students in resource and/or content mastery                                   | 90.8                        | 1,132.5        | 58.9          | 5.2              |
| Students who have moderate to severe disabilities (i.e., Life Skills classes) | 54.0                        | 283.0          | 12.0          | 4.2              |
| Students who have a variety of disabilities (various teacher assignments)     | 38.5                        | 245.3          | 10.5          | 4.3              |
| Students ages 3-5 (i.e., Preschool Program for Children with Disabilities)    | 45.9                        | 146.5          | 7.0           | 4.8              |
| Students who have emotional disturbances (adaptive behavior issues)           | 22.4                        | 105.8          | 7.0           | 6.6              |
| Students who have Limited English Proficiency (i.e., dual certified teachers) | 30.4                        | 177.2          | 6.0           | 3.4              |
| Students who have auditory impairments  | 10.0                        | 31.1           | 1.0           | 3.2              |
| Students in home-based settings   | 11.0                        | 25.0           | 0.5           | 2.0              |
| Students who have visual impairments  | 12.2                        | 31.0           | 2.5           | 8.1              |
| Students who have autism  | 13.6                        | 42.3           | 1.0           | 2.4              |
| <b>Totals</b>   | <b>--</b>                   | <b>2,219.7</b> | <b>106.4</b>  | <b>4.8</b>       |
| <b>Other Special Education Professionals</b>                                  |                             |                |               |                  |
| Educational diagnostician   | 32.7                        | 153.6          | 6.5           | 4.2              |
| Bilingual educational diagnostician   | 5.1                         | 16.5           | 3.0           | 18.2             |
| Speech language pathologist, licensed or certified                            | 39.4                        | 155.0          | 8.0           | 5.2              |
| Bilingual speech language pathologist, licensed or certified                  | 4.7                         | 14.5           | 3.0           | 20.7             |
| Licensed specialist in school psychology                                      | 14.1                        | 45.1           | 0.0           | 0.0              |
| Bilingual licensed specialist in school psychology                            | 3.2                         | 9.0            | 1.0           | 11.1             |
| Sign language interpreter   | 6.5                         | 20.0           | 3.0           | 15.0             |
| Occupational therapist  | 14.4                        | 29.8           | 0.0           | 0.0              |
| Physical therapist  | 13.0                        | 28.5           | 1.0           | 3.5              |
| Orientation and mobility specialist   | 6.9                         | 15.8           | 2.0           | 12.7             |
| <b>Totals</b>   | <b>--</b>                   | <b>487.8</b>   | <b>27.5</b>   | <b>5.6</b>       |
| <b>Special Education Paraprofessionals</b>                                    |                             |                |               |                  |
| <b>Totals</b>   | <b>78.9</b>                 | <b>1,416.1</b> | <b>58.0</b>   | <b>4.1</b>       |

Source. Human Resource Administrator Survey.

Note. SSA means Shared Service Arrangement. For percent of districts with position, the total number of respondents providing data for teacher positions varied from 278 to 283; total providing data for professional positions ranged from 276 to 278; total providing data for paraprofessional position was 285. For FTE, total number of respondents providing data for teacher FTE varied from 51 to 250; total providing data for professional positions ranged from 28 to 107; total providing data for paraprofessional position was 214. For FTE vacancies, total number of respondents providing data for teacher FTE vacancies varied from 39 to 162; total providing data for professional positions ranged from 27 to 66; total providing data for paraprofessional position was 142.

**Table A3. Staffing Levels in SSAs**

| Position  | Districts with Position (%) | FTE Positions | FTE Vacancies | Vacancy Rate (%) |
|---|-----------------------------|---------------|---------------|------------------|
| <b>Special Education Teachers Working Primarily with:</b>                     |                             |               |               |                  |
| Students in resource and/or content mastery                                   | 59.0                        | 210.0         | 15.0          | 7.1              |
| Students who have moderate to severe disabilities (i.e., Life Skills classes) | 74.4                        | 92.0          | 3.0           | 3.3              |
| Students who have a variety of disabilities (various teacher assignments)     | 37.8                        | 37.0          | 13.0          | 35.1             |
| Students ages 3-5 (i.e., Preschool Program for Children with Disabilities)    | 64.1                        | 34.0          | 1.0           | 2.9              |
| Students who have emotional disturbances (adaptive behavior issues)           | 51.3                        | 43.0          | 3.0           | 7.0              |
| Students who have Limited English Proficiency (i.e., dual certified teachers) | 17.9                        | 21.0          | 0.0           | 0.0              |
| Students who have auditory impairments  | 22.5                        | 14.0          | 1.0           | 7.1              |
| Students in home-based settings   | 38.5                        | 20.0          | 1.0           | 5.0              |
| Students who have visual impairments  | 72.5                        | 30.0          | 2.5           | 8.3              |
| Students who have autism  | 23.1                        | 14.0          | 1.0           | 7.1              |
| <b>Totals</b>   | <b>--</b>                   | <b>515.0</b>  | <b>40.5</b>   | <b>7.9</b>       |
| <b>Other Special Education Professionals</b>                                  |                             |               |               |                  |
| Educational diagnostician   | 97.6                        | 197.0         | 13.0          | 6.6              |
| Bilingual educational diagnostician   | 24.4                        | 17.3          | 3.0           | 17.3             |
| Speech language pathologist, licensed or certified                            | 95.2                        | 155.0         | 17.0          | 11.0             |
| Bilingual speech language pathologist, licensed or certified                  | 12.2                        | 10.0          | 2.0           | 20.0             |
| Licensed specialist in school psychology                                      | 56.1                        | 32.5          | 3.0           | 9.2              |
| Bilingual licensed specialist in school psychology                            | 12.2                        | 10.0          | 2.0           | 20.0             |
| Sign language interpreter   | 28.6                        | 22.0          | 4.0           | 18.2             |
| Occupational therapist  | 57.1                        | 24.0          | 1.5           | 6.3              |
| Physical therapist  | 54.8                        | 18.5          | 1.5           | 8.1              |
| Orientation and mobility specialist   | 41.5                        | 13.8          | 1.5           | 10.9             |
| <b>Totals</b>   | <b>--</b>                   | <b>500.1</b>  | <b>48.5</b>   | <b>9.7</b>       |
| <b>Special Education Paraprofessionals</b>                                    |                             |               |               |                  |
| <b>Totals</b>   | <b>85.7</b>                 | <b>425.0</b>  | <b>9.0</b>    | <b>2.1</b>       |

Source. Human Resource Administrator Survey.

Note. SSA means Shared Service Arrangement. For percent of districts with position, total number of respondents providing data for teacher positions varied from 37 to 40; total providing data for professional positions ranged from 41 to 42; total providing data for paraprofessional position was 42. For FTE, total number of respondents providing data for teacher FTE varied from 13 to 27; total providing data for professional positions ranged from 12 to 38; total providing data for paraprofessional position was 33. For FTE vacancies total number of respondents providing data for teacher FTE vacancies varied from 9 to 22; total providing data for professional positions ranged from 11 to 29; total providing data for paraprofessional position was 24.



## Appendix B



**Table B1. Staffing Levels for Charter Schools Including Single Districts, SSAs, and SSA Participant Schools**

| Position  | Total FTE Reported | Total Vacancy FTE Reported | Total Vacancy Rate (%) |
|---|--------------------|----------------------------|------------------------|
| <b>Special Education Teachers Working Primarily with:</b>                     |                    |                            |                        |
| Students in resource and/or content mastery                                   | 54.7               | 9.5                        | 17.4                   |
| Students who have moderate to severe disabilities (i.e., Life Skills classes) | 12.7               | 0.0                        | 0.0                    |
| Students who have a variety of disabilities (various teacher assignments)     | 68.2               | 6.5                        | 9.5                    |
| Students ages 3-5 (i.e., Preschool Program for Children with Disabilities)    | 7.0                | 6.0                        | 85.7                   |
| Students who have emotional disturbances (adaptive behavior issues)           | 34.7               | 3.0                        | 8.6                    |
| Students who have limited English proficiency (i.e., dual certified teachers) | 24.7               | 6.0                        | 24.3                   |
| Students who have auditory impairments  | 15.0               | 6.0                        | 40.0                   |
| Students in home-based settings   | 9.2                | 3.0                        | 32.6                   |
| Students who have visual impairments  | 3.5                | 2.0                        | 57.1                   |
| Students who have autism  | 5.0                | 2.0                        | 40.0                   |
| <b>Totals</b>   | <b>234.7</b>       | <b>44.0</b>                | <b>18.7</b>            |
| <b>Other Special Education Professionals</b>                                  |                    |                            |                        |
| 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                   |
| <b>Totals</b>   | <b>96.8</b>        | <b>38.0</b>                | <b>39.3</b>            |
| <b>Special Education Paraprofessionals</b>                                    |                    |                            |                        |
| <b>Totals</b>   | <b>59.3</b>        | <b>7.0</b>                 | <b>11.8</b>            |

Source. Human Resource Administrator Survey.

Note. SSA means Shared Service Arrangement. Data was provided by 45 respondents.