

# SPeNSE



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*Study of Personnel Needs in Special Education*

## Key Findings

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## **Key Findings from the Study of Personnel Needs in Special Education**

The Study of Personnel Needs in Special Education (SPeNSE), funded by the U.S. Department of Education's Office of Special Education Programs (OSEP), was designed to describe the quality of personnel serving students with disabilities and factors associated with workforce quality<sup>1</sup>. It included computer-assisted telephone interviews with a nationally representative sample of local administrators (n=358) and service providers (n=8,061), including special and regular education teachers, speech-language pathologists, and special education paraprofessionals<sup>2</sup>. Interviews were conducted in spring and fall 2000.

This report summarizes data from several different documents and also includes some analyses that do not appear elsewhere. Appendix A includes a complete list of SPeNSE publications that are available on [www.spense.org](http://www.spense.org).

### **Describing Teacher Quality**

It is difficult to separate discussions of teacher *quality* from discussions of teacher *quantity* because, as numeric shortages worsen, administrators are forced to hire less qualified applicants. As of October 1, 1999, 12,241 special education teaching positions nationwide were left vacant or filled by a substitute because a suitable candidate could not be found. Other indicators of teacher shortages include 33,262 special education teachers who were not fully certified for their main teaching assignment, 5,369 class size waivers and 5,480 caseload waivers that administrators sought, and 50,024 person days of substitute teaching that were used per week (short- and long-term).

<p><b>Special Education Teacher Demographics:</b></p> <ul style="list-style-type: none"><li>• 85 percent female</li><li>• 86 percent white</li><li>• 4 percent Hispanic</li><li>• 14 percent disabled, based on self-report</li><li>• Mean age: 43 years</li></ul>
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<p><b>General Education Teacher Demographics:</b></p> <ul style="list-style-type: none"><li>• 76 percent female</li><li>• 88 percent white</li><li>• 7 percent Hispanic</li><li>• 6 percent disabled, based on self-report</li><li>• Mean age: 43 years</li></ul>
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Administrators reported the greatest barrier to recruitment was a shortage of qualified applicants. The extent to which these shortages were perceived as barriers varied by region and poverty level. Shortages were less severe in the Northeast and in districts with lower rates of poverty. Insufficient salary and benefits and geographic location of the school were also perceived as barriers. Insufficient salary was perceived as particularly problematic in the Southeast and in high-poverty districts.

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<sup>1</sup> For more information on the SPeNSE study design and results, go to [www.spense.org](http://www.spense.org).

<sup>2</sup> SPeNSE data were weighted to generate national estimates. Forty-six percent of sampled districts and 69 percent of sampled service providers participated. Weight adjustments were used to address nonresponse bias but care should be used in interpreting results.

In SPeNSE, teacher quality was measured indirectly through questions about several of its component parts: experience, credentials, tested ability, self-efficacy, professional activities, and classroom practices. These were selected because of empirical or theoretical associations with student achievement. For example, previous research links experience (Biniaminov & Glasman, 1983; Ferguson, 1991; Lopez, 1995; Murnane, 1981; Turner & Camilli, 1988; Wendling & Cohen, 1980), certification (Darling-Hammond, 2000; Goldhaber & Brewer, 2000; Lopez, 1995), tested ability (Ferguson, 1998; Ferguson, 1991), and self-efficacy (Ashton & Webb, 1986; Midgely, Feldlaufer, & Eccles, 1989; Moore & Esselman, 1992; Ross, 1992;) to student achievement in general education; no such research has been conducted in special education.

### Teaching Experience

In 2000, the average special education teacher had 14.3 years of teaching experience, compared to 15.5 years for general education teachers. Special education teachers' length of experience varied somewhat by type of teacher and by geographic region. Special education teachers serving primarily children ages 3-5 averaged 13.3 years; teachers serving primarily

students with visual or hearing impairments averaged 16.4 years; those serving primarily students with emotional disturbance averaged 12.0 years; and all other special educators averaged 14.6 years. Special education teachers in urban areas were slightly more experienced than their colleagues in suburban and rural areas (15.2, 13.8, and 14.0 years, respectively).

<b>Geographical Regions</b>	
<b>Northeast:</b>	CT, ME, MA, NH, NJ, NY, RI, VT
<b>Mid-South:</b>	DC, DE, KY, MD, NC, VA, SC, TN, WV
<b>Southeast:</b>	AL, AR, FL, GA, LA, MS, OK, TX
<b>Great Lakes:</b>	IL, IN, IO, MI, MN, MO, OH, PA, WI
<b>Mountain Plains:</b>	AZ, CO, KS, MT, NE, NM, ND, SD, UT, WY
<b>Western:</b>	AK, CA, HI, ID, NV, OR, WA

Years of experience among special education teachers also varied by geographic region:

- |                   |      |             |      |
|-------------------|------|-------------|------|
| • Northeast       | 15.5 | • Mid-South | 13.8 |
| • Great Lakes     | 15.1 | • Southeast | 13.6 |
| • Mountain Plains | 13.9 | • Western   | 13.2 |

### Credentials

Fifty-nine percent of special educators had their Master's degree, compared to 49 percent of general education teachers. However, special education teachers were less likely than general educators to be fully certified for their main teaching assignment: 92 percent and 95 percent, respectively. Only 71 percent of beginning special education teachers, those with less than 3 years of teaching experience, were certified for their main assignment. This may reflect regulations in

some States that require teachers to work a year or two before achieving full certification. Certification status varied significantly by type of teaching assignment. Teachers who served primarily students with emotional disturbance were least likely to be certified for their main assignment. Ten percent of teachers who served primarily students with emotional disturbance were working on an emergency certificate, twice the rate of any other group.

Special education teachers' certification status did not vary significantly by metropolitan status, the age group of the students served, or geographic region, although differences by geographic region approached significance. Ninety-five percent of special education teachers in the Northeast were fully certified for their main teaching assignment compared with 93 percent in the Southeast, 93 percent in the Great Lakes, 91 percent in the Mountain Plains, 90 percent in the Mid-South, and 84 percent in the Western region.

### **Tested Ability**

Fifty-eight percent of special education teachers nationwide took a test required for certification or licensure. Of those special education teachers who were required to take such a test, 17 percent took the test more than once to pass. In comparison, 55 percent of general education teachers took a certification test, and 12 percent took it more than once to pass.

Testing requirements and performance varied significantly by region, which is not surprising given the role of State legislatures and agencies in mandating and designing such assessments. The highest percentage of teachers who took a test for certification lived in the Mid-South (78 percent). In other regions, the percentages varied from 42 to 52 percent. In the Western region, 25 percent of special education teachers took the certification test more than once to pass compared to 19 percent in the Southeast, 16 percent in the Mid-South and Mountain Plains, and 13 percent in the Northeast and Great Lakes. It is difficult to determine to what extent differences in pass rates reflect variation in the stringency of test requirements or differences in teachers' knowledge and skills.

Test performance also varied by metropolitan status. Twenty percent of special education teachers from rural areas took a test more than once to pass compared to 19 percent from urban areas and 15 percent from suburban areas.

Different types of special education teachers fared better on certification tests than others. Eleven percent of teachers who served primarily students with visual or hearing impairments took a certification test more than once, the lowest percentage, compared to 22 percent of teachers who served primarily students with emotional disturbance, the highest percentage.

### **Self-efficacy**

Overall, special education teachers reported high levels of self-confidence and self-efficacy in SPeNSE. Special educators felt most skillful in planning effective lessons, monitoring

students' progress and adjusting instruction accordingly, using appropriate instructional techniques, managing behavior, and working with parents. They felt least skillful in accommodating culturally and linguistically diverse students' learning needs, using professional literature to address problems, and using technology in instruction.

Overall, special educators' perceived skill in completing various work-related tasks differed by geographic region and metropolitan status. Special education teachers in the Western region rated their skills higher than teachers in several other regions. Those in rural districts rated their skills lower than teachers in urban and suburban districts. There were no significant differences in perceived skill based on the age group of the students taught.

This trend continued on other items designed to measure self-efficacy. Ninety-six percent of special educators agreed to a moderate or great extent that they had enough preparation and relevant experience to deal with most of their student's learning problems. This differed by region and metropolitan status, however. Special educators in the Northeast were significantly more confident than teachers in other regions that they had enough experience to deal with their student's learning problems. Special educators in rural areas were less confident than teachers in urban and suburban areas on this measure. Likewise, compared with special education teachers from rural areas, a higher percentage of special educators from urban and suburban areas strongly agreed with the statement 'you can deal successfully with your students' behavior problems.'

Twenty-two percent of special educators believe that many of the students they teach are not capable of learning the material they are supposed to teach them. Fewer special educators in the Northeast believed this than educators in other regions. Interestingly, a larger percentage of urban special educators strongly agreed with the statement 'your students are not capable of learning the material you are supposed to teach them' compared with suburban or rural educators.

### **Professional Activities**

While some theory suggests that professional activities contribute to teacher quality, there is no well-established measure of professionalism or any empirical research linking professionalism to student achievement. In SPeNSE, professional activities were defined as reading professional journals, belonging to professional associations, and being asked professional advice by colleagues.

Forty percent of special education teachers did not read any professional journals, and 31 percent did not belong to any professional associations. General educators were somewhat more likely than special educators to engage in these professional activities. Conversely, special educators were asked for advice 16.7 times per month, compared to 13.7 times for general education teachers.

## Selected Classroom Practices

SPeNSE measured classroom practices through self-report as opposed to direct observation. When asking teachers to assess their knowledge, skills, and practices, particular attention was awarded to five instructional areas: facilitating inclusion, secondary transition, teaching limited English proficient (LEP) students, teaching reading, and managing behavior. For example, 12 instructional practices were listed for teaching reading, and respondents were asked, for each of the 12, how often they use that approach *never, rarely, sometimes, or often*.<sup>3</sup>

*Facilitating inclusion.* Ninety-three percent of special education teachers worked in regular elementary or secondary schools. However, 80 percent of special education teachers' instructional time was spent in special education settings. Those teachers whose students spent part or all of their day in non-special education settings used a variety of techniques to support these children in inclusive settings, such as collaborating with non-special education teachers, identifying needed accommodations, and promoting interaction between children with and without disabilities. Moreover, 80 percent of all special education teachers reported that the practices they used to support inclusion were used throughout their school or district.

Use of practices to facilitate inclusion did not vary by metropolitan status; however, it did vary by geographic region and type of special education teacher. Teachers in the Western region reported using specified inclusion practices less frequently than teachers in the Mid-South or in the Mountain Plains.

Furthermore, preschool teachers used inclusive practices less often than any other group of special educators. Inclusion efforts at the preschool level may be hindered by a combination of factors: the lack of widespread preschool programs for nondisabled children and the absence of same-aged nondisabled peers in those facilities developed primarily to serve preschoolers with disabilities.

<b>Special Education Teachers' Practices in Facilitating Inclusion: Selected Items</b>				
Percent of teachers who:	<b>Never</b>	<b>Rarely</b>	<b>Sometimes</b>	<b>Often</b>
Work with the general educator to identify opportunities for the student to work on IEP goals within the context of non-special education activities	5.0	12.0	39.7	43.3
Identify necessary accommodations for students in the general education classroom	3.2	4.7	25.1	67.0
Develop curricular modifications that support the student's learning in the non-special education setting	5.5	9.5	31.8	53.2
Deliver support to the student in a way that benefits the entire class	6.7	11.2	33.5	48.6
Implement planned approaches to promote interaction between the student and peers without disabilities	6.6	12.5	34.3	46.6

<sup>3</sup> Tables in this section include sample items. Complete data on the frequency with which classroom practices teachers reported using additional practices are available at [www.spense.org](http://www.spense.org).

Because 75 percent of students with disabilities spend much of their day in regular classes, general education teachers must be prepared to teach them. In fact, 96 percent of general educators taught students with disabilities or had done so in the past. Overall, general educators reported confidence in serving students with disabilities. Eighty-seven percent felt successful in teaching most students with disabilities to a moderate or great extent, and a similar percentage felt somewhat or very confident in making educational decisions about special education students. There were no significant differences in the confidence general education teachers felt in providing services to students with disabilities or making educational decisions for them based on grade level, geographic region, or metropolitan status.

Furthermore, most general educators said they received the support they needed to teach students with disabilities to a moderate or great extent. This support included help from special education teachers, special procedures for working with students, continuing professional development on the needs of students with disabilities, and assistance from paraprofessionals. However, just over half of general educators who had been teaching 6 years or fewer received any preservice preparation in adapting instruction for students with disabilities, and only two-thirds were taught how to manage student behavior.

*Promoting secondary transition.* Teachers who served secondary-aged students with disabilities used a number of practices to aid in the transition from high school to post-school life. However, these practices were used less frequently than many of the best practices in teaching reading, facilitating inclusion, and managing behavior. Use of transition practices varied somewhat by region, with special educators in the Western region reporting that they used them more often than those in the Northeast or Great Lakes. Use of best practices to promote transition did not vary by metropolitan status or type of service provider.

<b>Secondary Special Education Teachers' Practices in Facilitating Transition: Selected Items</b>				
<b>Percent of teachers who:</b>	<b>Never</b>	<b>Rarely</b>	<b>Sometimes</b>	<b>Often</b>
Work with students and parents to identify specific post-school goals	5.8	14.5	34.8	44.9
Work with students and parents to identify job opportunities that match students' competencies	15.1	22.9	34.0	28.0
Prepare students to participate in the IEP process	7.6	9.9	27.9	54.6
Teach self-determination	3.4	6.1	28.9	61.6
Develop career awareness	4.6	8.7	33.5	53.1
Teach learning strategies	3.3	4.4	27.5	64.7

*Teaching LEP students.* Twenty-four percent of special education teachers' students were from a cultural or linguistic group different from their own, and 7 percent were limited English proficient (LEP). Use of best practices in teaching LEP students with disabilities did not vary by geographic region or metropolitan status. However, these practices were used more often by

preschool teachers and by teachers of students with visual or hearing impairments than by other special educators.

After controlling for other differences, teachers who used specific classroom practices designed to teach English language learners (ELL) tended to work in schools that had adopted a common approach to meeting ELL needs, had more continuing professional development in accommodating culturally and linguistically diverse students' instructional needs, and were more proficient in the non-English languages spoken by their students. In addition, special educators who considered themselves skillful in meeting the needs of culturally and linguistically diverse students had different instructional practices from their peers who considered themselves less skillful. These teachers more often taught vocabulary prior to a lesson, developed lessons specifically designed for English language development, or used extended discourse within a lesson.

While most special educators (71 percent) felt skillful in accommodating culturally and linguistically diverse students' instructional needs, many indicated they have not mastered the skill they need to accommodate these students. This skill deficiency is not surprising because 51 percent of recently prepared special educators said their preservice programs did not address the needs of this student population. Furthermore, the majority of today's special education teachers completed their initial preparation when the nation's students were considerably more homogeneous.

<b>Special Education Teachers' Practices in Teaching LEP Students: Selected Items</b>				
<b>Percent of teachers who:</b>	<b>Never</b>	<b>Rarely</b>	<b>Sometimes</b>	<b>Often</b>
Develop lessons specifically designed for English language development	19.7	20.9	26.7	32.7
Teach vocabulary words prior to a lesson	8.8	6.8	19.6	64.9
*Use students' native language to teach English language skills	28.5	23.8	26.2	21.5
*Use students' native language to teach a concept or to make a clarification	24.8	19.6	31.0	24.6

\*Item was asked only of teachers with some proficiency in non-English languages spoken by their students.

*Teaching reading.* Previous research consistently links practices, such as teaching phonics or phonemic skills, systematically teaching vocabulary, studying the style or structure of a text, having students summarize what they had read, and reading aloud with improvements in reading achievement (Pressley, Wharton-McDonald, Allington, Block, & Morrow, 1998; U.S. Department of Health and Human Services, 2000). Overall, special education teachers reported sometimes using best practices in teaching reading. While use of specified reading practices did not vary by geographic region or metropolitan status, they differed by type of special education teacher. Preschool teachers and teachers of students with visual or hearing impairments, for

example, used best practices to teach reading less often than teachers of students with emotional disturbance and other special education teachers.

<b>Special Education Teachers' Practices in Teaching Reading: Selected Items</b>				
<b>Percent who asked elementary-aged students to:</b>	<b>Never</b>	<b>Rarely</b>	<b>Sometimes</b>	<b>Often</b>
Read aloud	7.4	5.4	18.5	68.7
Practice phonics or phonemic skills	4.7	5.7	23.9	65.6
Practice vocabulary	2.4	2.2	20.2	75.2
<b>Percent who asked secondary-aged students to:</b>				
Systematically learn new vocabulary	0.8	4.4	20.3	74.5
Summarize their reading	3.6	6.7	25.3	64.3
Study the style or structure of a text	20.9	33.1	31.1	14.9

*Managing behavior.* On average, special education teachers also reported using best practices in managing behavior sometimes. Use of specified practices did not vary by metropolitan status or geographic region. However, it did vary by type of special education teacher. Not surprisingly, teachers of students with emotional disturbance reported using these practices most often, which may reflect not only their skills and training but also the types of students they serve.

<b>Special Education Teachers' Practices in Managing Behavior: Selected Items</b>				
<b>Percent of teachers who:</b>	<b>Never</b>	<b>Rarely</b>	<b>Sometimes</b>	<b>Often</b>
Provided a tangible acknowledgment or reinforcer for appropriate behavior	5.3	7.3	19.6	67.8
Provided a social acknowledgment or reinforcer for appropriate behavior	0.1	0.2	3.1	96.5
Taught social skills	2.4	5.0	21.9	70.6
Collected data to determine the extent to which an intervention is effective	8.7	18.9	42.8	29.5

### **Supporting Teacher Quality**

SPeNSE explored factors associated with teacher quality and intent to stay in the profession, including working conditions, preservice education, continuing professional development, and State and local policies.

## Working Conditions

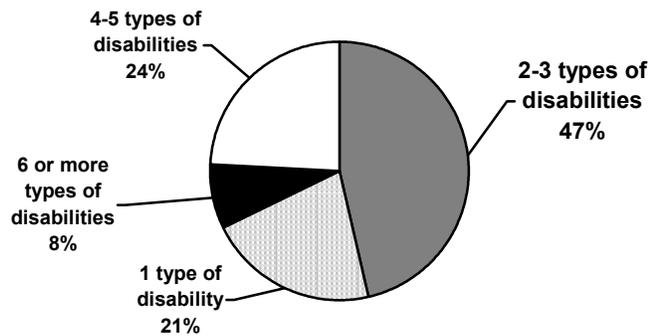
In SPeNSE, 6 percent of special education teachers planned to leave the profession as soon as possible. Of the special education teachers who planned to leave immediately,

- 17 percent said their workload was not at all manageable,
- 13 percent were not fully certified for their position,
- 76 percent said paperwork interfered with their job of teaching to a great extent, and
- 42 percent served students with four or more different primary disabilities.

These data suggest that working conditions are important to retaining special education teachers.

Special education teachers were sensitive to differences in school climate, even more so than general education teachers. After controlling for other differences, school climate was associated with the manageability of teachers' workload and their intent to stay in teaching. It is possible that a positive school climate counteracts some of the stress associated with teaching students with disabilities and, consequently, promotes retention. Schools with better climate may also be better organized, devote more attention to instruction, and have administrators who insulate teachers from forces, such as administrative duties and paperwork that detract from good teaching. The extent to which special education teachers perceived paperwork as interfering with their teaching was also a predictor of intent to leave the field after controlling for other differences.

**Number of different disabilities on special educators' caseloads**

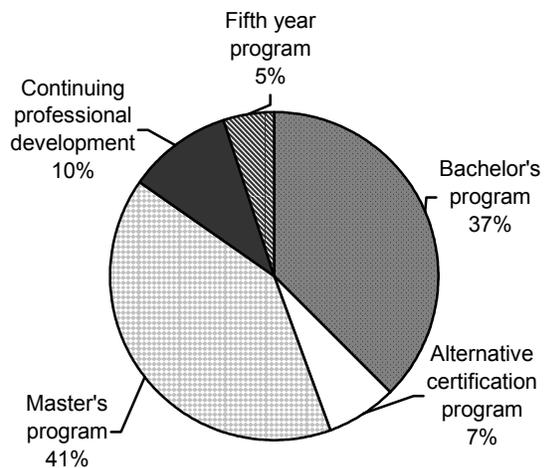


## Preservice Education

Special education teachers who rated their preservice preparation as very good or exceptional considered themselves more successful than others in providing services to students with disabilities and said their workload was more manageable. Plus, special education teachers who attended colleges or universities with stringent admissions requirements were far more likely than those attending less competitive institutions to pass tests required for teaching certification or licensure on the first try.

Many recently prepared special education teachers said their preservice programs did not address specific knowledge and skills important to teaching such as supervising paraprofessionals (77 percent), accommodating culturally and linguistically diverse students' needs (51 percent), using professional literature to address issues encountered in teaching (49 percent), and collaborating with general education teachers (47 percent). Not surprisingly, these were some of the areas in which special education teachers reported feeling least skillful.

**Special education teachers' routes to certification**



The type of school in which student teaching and other field experiences occurred was also important. For example, special education teachers who interacted with culturally and linguistically diverse students during their field experiences reported being more skilled in later meeting similar students' educational needs.

Teachers who majored in special education had higher aggregate teacher quality scores than those who did not. Furthermore, the route through which teachers earned their certification significantly predicted aggregate teacher quality scores. The highest scores were among those who completed a fifth year program or received certification through continuing professional development. The second highest scores were among those who earned certification through a Master's program, and third were those certified through a Bachelor's program. Those who earned certification through an alternative route had the lowest aggregate quality scores.

Several factors may account for these results. For example, those with previous teaching experience may benefit from their certification programs in ways that non-experienced teachers do not. Because years of experience is an important component of the aggregate teacher quality measure and alternative certification programs are a relatively recent phenomenon, the relationship between those two variables may be confounded. Previous research suggests that strong preservice programs require well-integrated coursework that connects subject matter and pedagogical knowledge; field experiences that are intensive and well supervised, teacher education that promotes reflection, a high degree of professional collaboration, and well-articulated standards around which teacher assessments are designed. (Blackorby, Brownell, Carlson, & Rosenberg, 2002)

## **Continuing Professional Development**

Overall, special educators devoted considerable time to continuing professional development in 1999-2000. Special education teachers on average spent 59 hours in professional development, 34% of which were required by their district or state. Fifty-four percent of special education teachers had an individual professional development plan.

Service providers who received 8 or more hours of professional development in an area usually perceived themselves to be significantly more skilled than did colleagues who received 0 to 7 hours of professional development. For example, 82 percent of preschool teachers who had 8 or more hours of continuing professional development in supervising paraprofessionals felt skillful to a great extent in doing so. Only 50% percent of those with less than 8 hours and 36% of those with no professional development felt equally skillful. Similarly, only 1% of general education teachers who received more than 8 hours of professional development in the past 3 years on collaborating with special education teachers felt not at all successful or successful to a small extent in teaching students with disabilities. This compares with 11% of those who received fewer than 8 hours of professional development and 14% of those who received none.

Both the scope and quality of professional development experiences appear to be associated with special education teacher quality. Teachers whose recent inservice experiences covered a broad range of specified topics<sup>4</sup> had higher aggregate teacher quality scores than those whose recent professional development covered fewer topics. Likewise, teachers who perceived their recent district-supported professional development as relevant and of high quality had higher teacher quality scores.

Surprisingly, the availability and helpfulness of induction activities was negatively associated with the aggregate teacher quality score. The most likely explanation is that teachers who participated in induction programs were relatively new teachers who scored lower on the aggregate teacher quality measure, which included years of experience as one of its factors.

## **State and Local Policies**

Many State and local policies were not significantly associated with aggregate teacher quality scores or intent to stay in teaching, including variables related to teacher salaries, State teacher assessments, and most variables related to recruitment practices. One of the variables that was a marginally significant predictor was the percentage of special education teachers in the district with tenure. It was positively related to the aggregate teacher quality score. This may again reflect the importance of experience in the quality measure.

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<sup>4</sup> These were knowledge and skills extracted from the Council for Exceptional Children's Standards for Entry into Practice.

## Summary and Implications

Teaching experience is an important component of teacher quality, and research suggests that high teacher turnover is detrimental to student learning. Therefore, limiting teacher attrition, in general, and among teachers with several years of experience, in particular, is central to enhancing workforce quality. In addition, current data on teacher shortages in conjunction with the age distribution of the nation's special education teachers suggests that threatened shortages are real.

The connection between shortages of *quantity* and shortages of *quality* are all too clear. For example, positions for teachers of students with emotional disturbance seem particularly difficult to fill, and the teachers in those positions, as a group, are less well prepared than their colleagues: they have fewer years of experience and were less likely to be certified for their main teaching assignment. While estimates suggested teachers of students with emotional disturbance were more likely to take a certification test more than once to pass, 22.1 percent compared to 16.5 percent, differences did not reach statistical significance.

Metropolitan status was a moderately strong variable in the SPeNSE analyses. It was significant in teachers' years of experience, performance on certification tests, and overall perceived skill, with urban and suburban educators emerging as consistently better prepared than rural ones.

Geographic region was also moderately predictive. The Western region had the lowest percentage of special education teachers certified for their main assignment, the highest percentage of teachers taking a certification test more than once to pass, but the highest perceived level of overall skill. Given recent efforts to reduce class sizes in California, issues associated with hiring uncertified teachers may again demonstrate ways in which numerical demand affects teacher quality.

### Describing Paraprofessionals' Qualifications and Support

Paraprofessionals provide essential support for students with disabilities. The average special education paraprofessional worked in five different classes per week and served 21

#### Paraprofessional Demographics:

- 94 percent female
- 78 percent white
- 9 percent Hispanic
- 5 percent disabled, based on self-report
- Mean age: 44 years

students, 15 of whom had disabilities. Fifteen percent of all students served by paraprofessionals were limited English proficient, and 31 percent of paraprofessionals were fluent or nearly fluent in the non-English languages spoken by their students. This is twice the rate of non-English proficiency for special education teachers. Most paraprofessionals spent at least 10

percent of their work week providing instructional support in small groups and providing one-on-one instruction.

Paraprofessionals brought to their work a range of educational experiences: 29 percent had a high school diploma or less, 38 percent had some college, and 32 percent had an associate's degree or higher. Approximately 13 percent had a paraprofessional certificate or credential, and 6 percent had a teaching certificate or license. The importance of higher education was significant. Paraprofessionals with college experience rated themselves significantly higher than those without college experience in their performance in several job responsibilities, including participating in IEP meetings and sharing information about students with teachers for planning, problem solving, and decision making.

Nationally, paraprofessionals spent 37 hours in professional development in 1999-2000. Thirty-three percent of those hours were required by their district or State. In the past 3 years, 76 percent of paraprofessionals received training in teaching academic concepts and skills, and 83 percent received training in implementing behavior management programs developed by teachers. Paraprofessionals who received more professional development in a specific work-related task felt consistently more skillful in that area. For example, 59 percent of paraprofessionals who received 8 or more hours of professional development in teaching academic concepts and skills felt highly skilled doing that compared to 38 percent of those who received no such professional development. As a group, more educated paraprofessionals spent far more time in professional development, which may have increased differences in levels of perceived skill.

### **Describing Speech-Language Pathologists' Qualifications and Support**

In 1999-2000, a typical school-based speech-language pathologist served 49 students per week. This caseload included students representing a wide range of ages, different primary disability categories, and different speech-language impairments. Only 5 percent of speech-language pathologists served students who all had the same primary disability; 40 percent had caseloads with six or more different disabilities represented. Speech or language impairments,

#### **Speech-Language Pathologist**

##### **Demographics:**

- 96 percent female
- 94 percent white
- 4 percent Hispanic
- 5 percent disabled, based on self-report
- Mean age: 43 years

learning disabilities, mental retardation, and autism were the disabilities most commonly represented. Furthermore, speech-language pathologists' caseloads comprised students from myriad cultural and linguistic groups. Speech-language pathologists reported that, on average, over one-fourth of their students were from a cultural or linguistic group different from their own, and 8.8 percent were English language learners.

Caseload size was significantly associated with speech-language pathologists' intent to stay in the profession. The median caseload for speech-language pathologists who planned to stay

as long as possible or until retirement was 46.2, compared to 49.2 for those who were undecided about their career plans and 59.7 for those who said they plan to leave school-based speech-language pathology as soon as possible.

Speech-language pathologists overall had exceptional credentials. Eighty-seven percent of all speech-language pathologists had a Master's degree, 92 percent had a speech-language pathology license, and 86 percent had a teaching certificate. Seventy-one percent of speech-language pathologists had a Certificate of Clinical Competence (CCC), a national certification issued by the American Speech-Language-Hearing Association. It indicates the individual has achieved the highest standards for practicing in the field. Furthermore, only 3 percent of speech-language pathologists were working under an emergency certificate.

Almost all speech-language pathologists (99.2 percent) rated their overall job performance as good, very good, or exceptional. The areas in which school-based speech-language pathologists felt most skillful included interpreting results of standardized tests, planning effective services, using appropriate clinical skills, and monitoring student progress and adjusting instruction accordingly. Areas in which they felt least skillful included using technology in instruction, accommodating culturally and linguistically diverse students' needs, supervising paraprofessionals, and using professional literature to address problems encountered in providing services.

The Study of Personnel Needs in Special Education (SPeNSE), funded by OSEP and conducted by Westat, included telephone interviews with a nationally representative sample of local administrators, special and general education teachers, speech-language pathologists, and paraprofessionals in spring and fall 2000. Forty-six percent of sampled districts and 69 percent of sampled service providers participated. Weight adjustments were used to address nonresponse bias, but care should be taken in interpreting results. For more information and a complete list of references, go to [www.spense.org](http://www.spense.org).

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## SPeNSE Publications

*Local Administrator's Role in Promoting Teacher Quality*, June 19, 2002

*Recruiting and Retaining High-Quality Teachers*, May 7, 2002

*Beginning Special Educators: Characteristics, Qualifications, and Experiences*,  
February 27, 2002

*A High-Quality Teacher for Every Classroom*, January 17, 2002

*Preschool Special Education Teachers*, February 27, 2002

*Paperwork in Special Education*, January 7, 2002

*General Education Teachers' Role in Special Education*, December 17, 2001

*The Role of Paraprofessionals in Special Education*, December 17, 2001

