



A Workload Analysis Approach for Establishing Speech-Language Caseload Standards in the Schools: Technical Report

Ad Hoc Committee on Caseload Size

This technical report was developed by an ad hoc committee formed by the American Speech-Language-Hearing Association (ASHA) and approved by ASHA's Executive Board in June 2002. Members of the Ad Hoc Committee on Caseload Size were co-chairs Frank Cirrin and Ann Bird, Larry Biehl, Sally Disney, Ellen Estomin, Judy Rudebusch, Trici Schraeder, and Kathleen Whitmire (ex officio). Vice President for Professional Practices in Speech-Language Pathology Alex Johnson (2000–2002) provided guidance and support.

Executive Summary

The position statement, guidelines, and technical report that make up *A Workload Analysis Approach for Establishing Speech-Language Caseload Standards in the Schools* were developed by ASHA to address member concerns that many school service programs require caseloads for speech-language pathologists (SLPs) that are too high in number to provide quality services. These documents are intended to serve as a template for local and state education agencies to determine SLP caseload size based on an analysis of total workload activities. The position statement asserts that education agencies must implement a workload analysis approach to setting caseload standards that allows SLPs to engage in the broad range of professional activities necessary to meet individual student needs. A

workload analysis approach is necessary in order to provide students the services they need, instead of the services that SLPs have time to offer or services that are convenient administratively. Caseloads must be of a size to allow SLPs to provide appropriate and effective intervention, conduct evaluations, collaborate with teachers and parents, implement best practices in school speech-language pathology, carry out related activities, and complete necessary paperwork and compliance tasks within working hours.

The Guidelines describe a rationale and conceptual framework for using an analysis of the total work activities of school-based SLPs to help determine the number of students who can be served. The Guidelines present a workload analysis process that can help to organize and document necessary SLP workload activities, and compare the time needed for their implementation to the time available. Strategies and resources that can help school SLPs advocate for improved working conditions are also discussed.

The Position Statement and Guidelines are consistent with requirements of the Individuals with Disabilities Education Act Amendments of 1997 (IDEA) that (a) each student with a disability be provided a continuum of service options that will guarantee a free, appropriate public education based on the student's individual needs, and (b) special education and related services be linked to progress within the general education curriculum. They also are consistent with ASHA's guidelines for the roles and responsibilities of the school-based speech-language pathologist, the scope of practice in speech-language pathology and the position statement on roles and responsibilities of speech-language pathologists with respect to reading and writing in children and adolescents.

The Technical Report summarizes the literature that establishes the scientific basis for the Position Statement and provides the background for the Guidelines.

Reference this material as: American Speech-Language-Hearing Association. (2002). *A workload analysis approach for establishing speech-language caseload standards in the schools: Technical report*. Rockville, MD: Author.

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What Are “Caseload” and “Workload”?

Traditionally, a school SLP’s workload has been conceptualized as being almost exclusively synonymous with caseload. Caseload is more accurately conceptualized as only one part of SLPs’ total workload. The term **caseload** typically refers to the number of students with Individualized Education Programs (IEPs) or Individualized Family Service Plans (IFSPs) that school SLPs serve through direct and/or indirect service delivery options. In some school districts, SLP caseloads may also include students who do not have identified disabilities, and who receive prereferral intervention and other services designed to help prevent future difficulties with language learning and literacy. School SLPs may also serve as case managers for all or some students on their caseload, which adds significant responsibilities and time for writing and managing IEPs, as well as assuring compliance with special education regulations. **Workload** refers to all activities required and performed by school-based SLPs. SLP workloads include considerable time for face-to-face direct services to students. Workloads also include many other activities necessary to support students’ education programs, implement best practices for school speech-language services, and ensure compliance with IDEA and other mandates. When a student is added to a caseload for direct services, significant amounts of time within the school day, week, or month must be allocated for other important workload activities necessary to support that student’s education program and meet education agency mandates.

Recent Influences on School SLP Caseloads, Responsibilities, and Workload

Although the average number of students on speech-language caseloads has remained essentially unchanged over the past decade, the role of the school-based SLP has changed dramatically. Additional federal and state requirements to ensure increased student access to general education programs and curriculum, consideration of assistive technology, and billing of government agencies and health insurance companies are just a few examples of mandated responsibilities that did not exist a decade ago. As a result, the standards of what constitutes a “reasonable” caseload are much different today from 10 years ago.

IDEA, in particular, has increased the responsibilities of the school-based SLP. With IDEA reauthorization, school SLPs now serve more children and adolescents with multiple disabilities and complex communication disorders. These students require intensive, long-term interventions and greater use of individualized and smaller group services, as well as more frequent contact every week. They often receive services from a variety of providers, resulting in a need

for greater collaboration in planning and providing these services. Another change is that SLPs must now provide services in the least restrictive environment and through the general education curriculum. This requires additional planning and collaboration time with other teachers and professionals as well as time for SLPs to better understand the general education curriculum. In addition, SLPs now play many important direct and indirect roles in facilitating literacy for children and adolescents.

Federal, State, and Local Caseload Policies

Caseload size in special education programs (including speech-language programs) for students with disabilities is not mentioned in federal special education laws, leaving control of this matter to state law and regulations. State and local policies on caseloads for SLPs are variable. Although 28 states (56%) establish maximum caseload guidelines for school SLPs, 22 states (44%) leave determinations to local districts. For states with numerical guidelines, speech-language caseload limits extend from a low of 40 students for one SLP to highs of 80:1.

SLP Caseloads in Schools

In the decade since ASHA recommended that school SLP caseloads not exceed 40 under any circumstances, with special populations and circumstances dictating a maximum caseload of 25 or less, the average number of students on caseloads has remained significantly higher than these maximum numbers. Recent surveys indicate an average caseload size of 53; some members report caseloads as large as 110. Between 1990 and 1999, the number of children with speech-language impairments grew by more than 10%. Students in virtually all other disability categories served by SLPs have shown large increases in the past 10 years as well.

Workload Time Activities of SLPs

The amount of time in a school week SLPs devote to direct intervention with students has increased over the past several years. At the same time, other required workload activities for SLPs have increased within an unaltered time frame. SLPs report that the number of hours each week used for direct intervention with large numbers of students leaves little time for meetings, collaborating with other teachers, and supporting students’ education programs in the least restrictive environment.

Caseload Effects and Service Delivery Options Used With Students

Large caseloads appear to be a factor constraining the service delivery options SLPs provide to students with disabilities. Despite IDEA’s focus on

collaboration, and evidence that collaboration and consultation support notions of best practice, most intervention services continue to be delivered through a pullout model, primarily with groups rather than individuals. Large caseloads have been shown to relate to less individual treatment offered to students, more group treatment, and an increase in the size of treatment groups.

Caseload Effects and Student Outcomes

Student outcomes are affected when SLPs provide intervention services to large caseloads. Larger caseloads appear to minimize opportunities for individualization of interventions. In smaller size instructional groups, students with a wide range of disabilities are more engaged and have better student outcomes. Among desired student outcomes, communication skills, in particular, appear to be positively influenced by small treatment group size, and negatively influenced by larger treatment group size. This includes students with severe disabilities who verbalize and use gestures to communicate more in small group settings. In addition, evidence suggests that students on large caseloads take longer to make progress in communication skills.

Caseload Effects and Working Conditions Related to Teacher Attrition and Shortages

The current trend of increased school SLP caseloads and the expanded responsibilities required of teachers and other providers in special education (including SLPs) appear to be important factors contributing toward high rates of attrition. Large caseloads are associated with the difficulties education agencies have recruiting and retaining qualified SLPs.

Technical Report

Background

The position statement, guidelines, technical report, and technical assistance manual that make up *A Workload Analysis Approach for Establishing Speech-Language Caseload Standards in the Schools* were developed by ASHA to address member concerns that many school service programs require caseloads for speech-language pathologists (SLPs) that are too high in number to provide quality services. A major goal of ASHA's focused initiatives for school-based programs and services is to increase the number of states and school districts that use total SLP workload time and activities to determine the number of children who can be served appropriately. Strategies to achieve this outcome include a revision of ASHA's policy documents on caseload size, which had been developed to pro-

vide clear guidelines for determining maximum school caseloads (ASHA, 1984, 1993). The revised documents are intended to serve as a template for education agencies to determine SLP caseload size based on an analysis of total workload activities. These may include, but are not limited to, IEP meetings, administrative tasks, evaluation time, paperwork, consultation, planning time, and direct and indirect intervention services. The documents are consistent with requirements of the Individuals with Disabilities Education Act Amendments of 1997 (IDEA; U.S. Congress, 1997; U.S. Dept. of Education, 2000) that (a) each student with a disability be provided a continuum of service options that will guarantee a free, appropriate public education based on the student's individual needs, and (b) special education and related services be linked to progress within the general education curriculum. They also are consistent with ASHA's guidelines for the roles and responsibilities of the school-based speech-language pathologist (1999), the scope of practice in speech-language pathology (2001f) and the position statement on roles and responsibilities of speech-language pathologists with respect to reading and writing in children and adolescents (2001d).

What Is Known About SLP School Caseloads?

What Are "Caseload" and "Workload"? How Does Caseload Relate to Workload?

Traditionally, a school SLP's workload has been conceptualized as being almost exclusively synonymous with caseload. Caseload is more accurately conceptualized as only one part of SLPs' total workload. The term **caseload** typically refers to the number of students with Individualized Education Programs (IEPs) or Individualized Family Service Plans (IFSPs) that school SLPs serve through direct and/or indirect service delivery options. In some school districts, SLP caseloads may also include students who do not have identified disabilities, and who receive prereferral intervention and other services designed to help prevent future difficulties with language learning and literacy (ASHA, 2000b). School SLPs may also serve as case managers for all or some students on their caseload, which adds significant responsibilities and time for writing and managing IEPs, as well as assuring compliance with special education regulations. **Workload** refers to all activities required and performed by school-based SLPs. SLP workloads include considerable time for face-to-face direct services to students. Workloads also include many other activities necessary to support students' education programs, implement best practices for school speech-language services, and ensure compliance with IDEA and other mandates. A more

detailed discussion of the roles, responsibilities, and activities in the workloads of school SLPs is presented in the Guidelines document that accompanies this Technical Report.

How does caseload relate to workload? Special educators and SLPs have reported that increases in caseloads correspond with simultaneous increases in meetings and paperwork demands (e.g., Russ, Chiang, Rylance, & Bongers, 2001). Each student added to the caseload increases the time needed not only for evaluation, diagnosis, and direct and indirect services, but

also for mandated paperwork, multidisciplinary team conferences, parent and teacher contacts, and many other responsibilities. Multiplying the number of students on the speech-language caseload by the number of forms that must be completed per student and the number of meetings that must be attended gives a rough indication of the time implications of this factor (ASHA, 1993). Table 1 presents an example from a Midwestern urban school district of the required forms and meetings added to SLPs' workloads when just one student is added to the caseload.

Table 1. An example of forms and meetings that are added to the workload of a school SLP when one student is added to the caseload.

Referral

- Pre-referral consultation **meeting** with general education teacher
- Pre-referral **meeting** with parent
- Pre-referral team **meeting**
- Pre-referral **forms (13)**

Evaluation and Re-evaluation

Evaluation/re-evaluation planning **meeting**

- Parent consent **form (1)**
- Notice of team meeting **forms (3)**
- Reducing bias in assessment **forms (8)**
- Evaluation/re-evaluation summary report **forms (2)**
- Disability designation **form (1)**

IEP

- IEP **meeting**
- Notice of IEP meeting **forms (3)**
- IEP **forms (2)**
- State general education standards **forms (2)**
- Extended school year **forms (2)**
- Assistive technology **forms (2)**
- Medicaid billing consent **form (1)**

Progress Reports

- Progress report **meetings (4)**
- Notice of progress report meeting **forms (4)**
- Progress report **forms (4)**

Discharge

- Discharge/significant change **meeting**
- Notice of proposed change to IEP meeting **forms (3)**
- Exit summary **forms (2)**

Additional meetings/forms not reflected in the totals listed above may include:

- *Suspension meetings and forms, conditional intervention meetings and forms, functional behavior assessment and manifestation determination meetings and forms, meetings and forms for significant changes to IEP, team override of eligibility criteria forms, meetings and forms for transitions to other schools and/or programs, special education and grade level team meeting, additional meetings at parent request.*

<p>Totals:</p> <ul style="list-style-type: none"> • 10 Meetings • 52 Forms

Thus, when a student is added to the caseload for direct or face-to-face services, significant amounts of time within the school day, week, or month must be allocated for other important workload activities necessary to support that student's education programs and meet education agency mandates.

Caseload Concerns in Special Education

Concerns about caseload size in the schools are not limited to speech-language services (McCrea, 1996; Russ, Chiang, Rylance, & Bongers, 2001; Rylance, Chiang, Russ, & Dobbs-Whitcomb, 1999). Caseloads for special education teachers have been called "unmanageable" (Council for Exceptional Children [CEC], 2001), and the caseload issue has become a priority for special education professional and advocacy groups (CEC, 2001), as well as state and local education agencies (e.g., Minnesota Department of Children, Families & Learning, 2000; Ohio Legislative Office of Education Oversight, 1999). Russ et al. (2001) found that 72% of the special education teachers they surveyed reported that large caseloads had a negative impact on their ability to meet the needs of the students, including a decrease in 1:1 instruction and a decrease in student-teacher contact time. In addition, larger caseloads were strongly associated with teacher perceptions of diminished student progress in meeting IEP goals. The Council for Exceptional Children has recently stated that large caseloads are the most pressing problem facing special education teachers today. They maintain that current caseload regulations do not take into account each child's disability and education needs, and make it nearly impossible to individualize and provide quality instruction (CEC, 2000).

Federal, State, and Local Caseload Policies

Caseload size in special education programs (including speech-language programs) for students with disabilities is not mentioned in federal special education laws, leaving control of this matter to state law and regulations. However, the U.S. Department of Education does have oversight of state requirements through its monitoring responsibility because the caseload issue is related to provision of a free, appropriate public education in the least restrictive environment. There is extensive variation among state requirements in this area. No two states have the same, or even very similar, regulations on caseload for special education (National Association of State Directors of Special Education [NASDSE], 2000).

Recent reviews of state regulations on special education caseload/class size (Ahearn, 1995; McCrea, 1996; NASDSE, 2000; Rylance, Chiang, Russ & Dobbs-Whitcomb, 1999) reveal that some states specify special education class size by students' age span or grade

level, with preschool student-to-teacher ratios specified separately. Another common criterion is the type of service that students receive, with different student-to-teacher ratios for resource rooms, self-contained classes, speech-language treatment, and other related services. Most states include a combination of criteria for caseload/class size in their regulations, for example, specifying different mandated student-to-teacher ratios based on the severity of each student's disability and how many intervention services are necessary. In many states, the issues of class size and caseloads for special education and related services are left to local education agencies appropriate to the need of students (NASDSE, 2000). Many states are in the process of revising their regulations to comply with the 1997 amendments to the Individuals with Disabilities Education Act (IDEA) and associated regulations. However, since federal law does not address caseload or class size, it is likely that state requirements in this area will not be changed as part of that update effort.

State and local policies on caseloads for SLPs demonstrate variability similar to caseload/class size regulations for other special education services. Although 28 states (56%) establish maximum caseload guidelines for school SLPs, 22 states (44%) leave determinations to local districts (Rylance et al., 1999). For states with numerical guidelines, speech-language caseload limits extend from a low of 40 students for one SLP in Hawaii and Wisconsin to highs of 80:1 in Ohio (Chiang & Rylance, 2000).

Several important but unanswered questions emerge from reviews of caseload policies and caseload sizes across the country. Does a general guideline that merely sets a goal of "appropriate to the needs of each student with an IEP" (NASDSE, 2000) designate enough protection for the delivery of individualized services? Does setting a maximum caseload result in flexibility for education agencies, or are they used to define a number that is often interpreted as a minimum threshold to add on to, rather than a true index of maximum capacity? Recently these questions appear to have concerned decision makers at federal, state, and local levels, as suggested by the following statement from K. Warlick, Director of Special Education Programs, U.S. Department of Education:

"Setting caseloads is a local and state issue, but excessive caseloads can potentially impede the ability to provide a free, appropriate public education to students. I believe that caseloads over 35 impede the ability to meet the individual needs of students. Some therapists should have even lower caseloads commensurate with the intensity of services needed by the students" (cited in Annett, 2001).

SLP Caseloads in Schools

Nationwide, SLPs provide services to students from at least four different groups. First, SLPs serve school-age students who are eligible under IDEA as “speech-language impaired” (U.S. Department of Education, 2000). These students make up approximately 20% of **all** students in the United States identified with **any** disability. Second, SLPs provide related services to an estimated 50% of the remaining children and adolescents identified under IDEA with primary disabilities other than speech-language impairment (e.g., autism, developmental delay, cognitive disabilities, learning disabilities, and deaf/hard of hearing). More than two million school-age children receive education services from SLPs in just these two categories. Third, SLPs provide intervention to more than a half-million preschoolers who are eligible for speech-language services. Fourth, SLPs work directly and indirectly with many students who receive prereferral intervention and other services designed to help prevent future difficulties with language learning and literacy (ASHA, 2000b). Between 1990 and 1999, the number of children with speech-language impairments grew by more than 10%. Students in virtually all other disability categories served by SLPs have also shown large increases in the past 10 years (U.S. Department of Education, 2000).

Studies reveal wide variation across states and local school districts for average monthly caseloads of school-based, ASHA-certified SLPs (see *Appendix A* for information on current speech-language caseloads in the states). According to the ASHA 2000 Schools Survey, the average (median) monthly caseload of school-based ASHA-certified SLPs is 53, ranging from 15 to 110. These data are consistent with the findings of the ASHA 1999–2000 National Outcomes Measurement System (NOMS) report, which found caseload sizes ranging from 25 to 104, with an average caseload of 52.4 students (ASHA, 2000a). This NOMS report presents outcome data for the 1999–2000 school year on 547 students with disabilities receiving speech-language services. These data track student progress in treatment over the course of an IEP year, and allow examination of the effects of service delivery factors (i.e., caseloads and group size) on student outcomes.

In the decade since ASHA recommended that school SLP caseloads not exceed 40 under any circumstances (ASHA, 1993), the average number of students on caseloads has remained significantly higher than this maximum number. Figures from the 2000 survey are very similar to data reported in the 1992 ASHA Omnibus Survey, which indicated that the average monthly caseload for SLPs working in the schools full-

time was 52 (median of 50); in addition, SLPs commonly reported caseloads of 70 to 80 (Peters-Johnson, 1992). Caseloads can also be quantified in terms of the number of intervention sessions in a given time frame. School SLPs reported an average of 52 individual sessions per month, and an average of 82 group sessions per month in 2001 (ASHA, 2001b). In 1992, SLPs reported having a mean of 49 individual sessions and 83 group sessions per month (Peters-Johnson, 1992). In the past decade the average number of students on SLP caseloads in the schools has not changed despite an expansion of SLP mandated roles and responsibilities, as described later in this document.

Workload Time Activities of SLPs

As reported by ASHA (ASHA, 2001e), recent data suggest that school-based, ASHA-certified SLPs spend more time now in direct contact with students than they did 5 years ago, leaving less time for consultation and other indirect services, collaboration, planning, paperwork, and other professional responsibilities. School-based SLPs report (ASHA, 2000b) that they spend an average of 6 hours per day on direct contact with students. In a typical week, SLPs report that they spend approximately 70% of their time providing direct intervention and evaluations. The remainder of their time is spent on other required work-related activities, including record keeping, paperwork, and report writing; planning and preparation for intervention; and parent and staff meetings.

A comparison between data from the 2000 and 1995 Schools Surveys (ASHA, 2001e) on the average amount of time spent per week on professional activities reveals that the percentage of time spent on direct intervention increased from 54% in 1995 to 62% in 2000. At the same time, there was a corresponding decrease in the time available for other mandated workload activities including time for evaluations (9% to 7%), planning with teachers (8% to 6%), and record keeping and paperwork (9% to 8%).

Other studies suggest that some SLPs spend even more time in direct student service (Chiang & Rylance, 2000; Vance, Hayden, & Eaves, 1989). For example, Chiang and Rylance (2000) reported that 75% of school SLPs' time at work is spent delivering student intervention services, with a corresponding decrease in the time left for other work activities. None of the studies reviewed in this section looked specifically at indirect or consultative speech-language services even though these are important service options and have received considerable attention in the literature on best practices in schools (e.g., Cirrin & Penner, 1995).

Recent Influences on School SLP Caseloads, Responsibilities and Workload

Although the average number of students on speech-language caseloads has remained essentially unchanged over the past decade (ASHA, 2000b; Peters-Johnson, 1992), the role of the school-based SLP has changed dramatically (ASHA, 1991; 1999, 2001a, 2001f; Beck & Dennis, 1997; Cirrin & Penner, 1995; Eger, 1992; Ehren, 2000; Elksnin & Capilouto, 1994; Prelock, 2000; Whitmire, 2001). Additional federal and state requirements to ensure increased student access to general education programs and curriculum, consideration of assistive technology, and billing government agencies and health insurance companies are just a few examples of mandated responsibilities that did not exist a decade ago. Similarly, increased workload responsibilities have been noted in such areas as communication with parents, general and special education teachers, and administrators; participation on teams; paperwork requirements; and supervising the work of paraprofessionals. As a result, the standards of what constitute a “reasonable” caseload are different today from 10 years ago.

IDEA, in particular, has increased the responsibilities of the school-based SLP. With the IDEA reauthorization, school SLPs now:

- Serve more children and adolescents who have complex communication disorders that require intensive, long-term interventions. Children and adolescents with more severe disabilities may require greater use of individualized and smaller group models of service delivery as well as more frequent contact every week (U.S. Department of Education, 2000).
- Serve more children and adolescents who are medically fragile or who have multiple disabilities. The U.S. Department of Education (2000) reports that the most common service for children and adolescents with two or more co-occurring disabilities was speech-language intervention. In addition, students with co-occurring disabilities often receive services from a variety of providers, resulting in a need for greater collaboration in planning and providing these services.
- Provide services in the least restrictive environment and through the general education curriculum. This requires additional planning and collaboration time with other teachers and professionals as well as time for SLPs to better understand the general education curriculum.
- Play many important direct and indirect roles in facilitating literacy for children and adoles-

cents with and without communication disorders (ASHA, 2001b) as a result of the focus on measurement of student progress in the general education curriculum. Appropriate roles for SLPs with respect to literacy include, but are not limited to, prevention, identification, assessment, intervention, monitoring, and follow-up.

- Report on student progress more frequently and attend more meetings with general education teachers and parents.

A number of specific provisions in IDEA affect many workload activities of SLPs in schools. Table 2 presents the major tenets of IDEA that mandate the type of services that students with disabilities receive in schools, and thus affect the required workload activities of school-based SLPs. Summaries of other selected legislation and court decisions related to expanded SLP responsibilities are presented in *Appendix B*.

One federal mandate that warrants attention is that education agencies must ensure that each student with a disability is provided a continuum of service options that will guarantee a free, appropriate public education based on the student’s individual needs. Both ASHA (2001f) and the National Joint Committee on Learning Disabilities (1993) support the use of a continuum of services and reject the arbitrary placement of all students in any one setting for administrative convenience. These groups have recommended the use of a variety of models through which inclusive practices can be provided, including resource (pull-out) programs, classroom-based service options, and consultative interventions. The current literature on best practices in school speech-language pathology has reinforced this aspect of IDEA as well, as illustrated by the following quotation.

“Meeting the mandates of IDEA requires that SLPs move away from exclusive use of the traditional clinical model of individual and small-group pullout therapy and instead engage in collaborative consultation, authentic assessment, curriculum-based intervention programs, and classroom-based services. This provides us with a rich opportunity to benefit from the strength of collaborative team models, and to offer our students educationally relevant and functional programs” (Whitmire, 2000).

The scope of practice for speech-language pathology (ASHA, 2001f) has also continued to expand and evolve in response to significant changes in the severity and complexity of disabilities of students currently enrolled in schools. These changes have exerted a strong influence on the workloads and roles played by school-based SLPs. The scope of practice reflects the new knowledge bases and clinical skills necessary to

Table 2. IDEA’s influence on student needs and expanded SLP responsibilities in schools.

Statutes, Regulations, & Other Federal Sources	What Is the Intent	Implications for School SLP Workload
<p><u>1. Zero reject:</u> 300.125 Child Find of 1999 Final IDEA Regulations SUBPART B</p>	<p>1. Schools must educate all children with a disability, no matter how severe. Each state is responsible for locating, identifying, and evaluating all children residing in the state suspected or having disability.</p>	<p>1. School speech-language pathologists (SLPs) must work with school evaluation teams to identify all students suspected of having a speech and/or language disability whether it is the primary disability or a disability related to another category under IDEA. The range and severity of students with disabilities that require speech-language services has greatly expanded, increasing school caseloads. Children with more severe disabilities may require greater use of individualized and smaller group models of service delivery as well as more frequent contact every week.</p>
<p><u>2. Nondiscriminatory evaluation:</u> 300.19 of 1999 Final IDEA Regulations SUBPART A</p>	<p>2. A student with disabilities must receive a full, individual evaluation before being placed in special education. The evaluation must be nondiscriminatory and fair to every student, even nonverbal and nonreading students and those with different cultural backgrounds.</p>	<p>2. The evaluation process must determine the student’s level of communication functioning even if the student is nonverbal and from a different cultural background. This takes more time because of the need to coordinate and work with interpreters, plan and choose appropriate alternative and authentic assessments, etc.</p>
<p><u>3. FAPE</u> 300.113 and 300.121 of 1999 Final IDEA Regulations SUBPART A</p>	<p>3. Free, appropriate public education (FAPE): All children identified with a disability have the right to a free and appropriate education. An IEP must be developed according to each child’s needs. The focus is on improving teaching and learning, with the specific focus on the IEP as the primary tool for enhancing the students’ involvement and progress in the general curriculum.</p>	<p>3. Each student receiving speech and/or language services should be educated with peers whenever possible while addressing the student’s individualized needs. This includes meeting and collaborating with general education teachers.</p>
<p><u>4. Least restrictive environment (LRE)</u> 300.130 of 1999 Final IDEA Regulations SUBPART B</p>	<p>4. To the maximum extent appropriate, students with disabilities should be educated with peers who do not have disabilities, whenever possible. LRE must be individualized and appropriate to each student’s needs.</p>	<p>4. Each student receiving speech-language services should be educated with typical developing peers whenever possible, while addressing the student(s) IEP needs to help him/her progress in the general curriculum. This adds to SLP workload activities to meet and collaborate with general education teachers, understand the demands of the curriculum at all grade levels, and apply general ed. curriculum standards, etc.</p>
<p><u>5. Due process</u> 300.501 of 1999 Final IDEA Regulations SUBPART D</p>	<p>5. Due process: Parents/legal guardians must be notified and give consent during the assessment and evaluation process. Early identification of to children with disabilities and provision of services are promoted.</p>	<p>5. This permission includes assessments and evaluations for speech and language functioning. This involves increased paperwork and meeting specific timelines that affect the SLP’s workload. Also, compliance tasks, case management tasks, etc.</p>

Statutes, Regulations, & Other Federal Sources	What Is the Intent	Implications for School SLP Workload
<p><u>6. Parent participation</u> 300.345 of 1999 Final IDEA Regulations SUBPART C</p>	<p>6. Parental participation: Teams composed of parents/legal guardians and school personnel must make special education decisions.</p>	<p>6. Parents should be involved as team members in all decisions relative to speech and language services. Parents are expected to be equal partners along with school personnel in developing, reviewing, and revising the IEP for their child. Several requirements are designed to guarantee parent participation, including notifying parents with adequate time so they have the opportunity to attend an IEP meeting, documenting phone calls, correspondence, home visits, and all efforts to include the parents. More meetings, more contacts with parents that add to the SLP workload.</p>
<p><u>7. Early intervention</u> 300.125 Child Find of 1999 Final IDEA Regulations SUBPART B</p>	<p>7. Clarifies that for children from birth to age 2 are the responsibility of the local education agency to ensure compliance with child find when the lead agency for the Part C program is different.</p>	<p>7. SLPs are involved in identification of children birth to age 2 in some states.</p>
<p><u>8. Transition services</u> 300.29 of 1999 Final IDEA Regulations SUBPART A</p>	<p>8. Transition services means a coordinated set of activities for the student with a disability designed to promote movement from school to post-school activities.</p>	<p>8. Transition services must be based on the individual needs of the student and include many services that affect the SLP's workload, such as instruction, related services, and community experiences and, if appropriate, acquisition of daily living skills and functional vocational evaluation.</p>
<p><u>9. Assistive technology</u> 300.5 and 300.6 1999 Final IDEA Regulations SUBPART A</p>	<p>9. Assistive technology devices mean any item, piece of equipment, or product system, whether acquired commercially, off the shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of children with disabilities. Assistive technology services mean any service that assists a child with a disability in the selection, acquisition, or use of an assistive technology device. This must be addressed in every IEP.</p>	<p>9. The SLP may be involved in evaluation of the student's needs; providing the acquisition of assistive tech. devices; selecting, designing, fitting, customizing, adapting, applying, maintaining, or repairing such devices; coordinating and using other therapies, interventions or services; training or technical assistance to teachers and family members and others involved with the students. These tasks are very time consuming in the SLP workloads.</p>
<p><u>10. Participation in state/district assessments</u> 300.138 of 1999 Final IDEA Regulations SUBPART A</p>	<p>10. IDEA mandates that students participate in school-wide testing and demonstrate that they are making progress in the school curriculum</p>	<p>10. SLPs must know the language-learning demands of state and district assessments in order to address student needs such as identifying appropriate accommodations and modifications to enable students to participate.</p>

Statutes, Regulations	What Is the Intent	Implications for School SLP Workload
<p><u>11. Multidisciplinary teaming</u> 300.344 IEP Team of 1999 Final IDEA Regulations SUBPART C</p>	<p>11. As a member of a professional team, the SLP is among a cadre of staff who may be responsible for implementing the IEP communication goals and objectives. In the teaming concept teachers/staff share responsibility for aspects of student learning. This provides the opportunity for joint ownership of student success and maximizing connection to education standards, with particular emphasis on building literacy skills.</p>	<p>11. All IEP goals and objectives are to be developed by the team and are not the sole responsibility of the SLP. In order for regular education teachers, special education teachers, and speech-language pathologists to team, they need time to meet, share information about students' strengths and needs, and develop appropriate goals and objectives.</p>
<p><u>12. Connection to general education curriculum:</u></p> <ul style="list-style-type: none"> • Integration/inclusion • Contextual-based evaluations <p>333.26 of 1999 Final IDEA Regulations SUBPART A 300.346 of 1999 Final IDEA Regulations SUBPART C</p>	<p>12. Children and adolescents with disabilities and their teachers are accountable for these students' progress in the general education curriculum. Specific instruction should be designed to ensure access of the child to the general curriculum so that he or she can meet the education standards that apply to all children. The reauthorization of IDEA calls for more educationally relevant IEPs. These changes are designed to lead to integrated speech and language service delivery that includes curriculum-based assessment and intervention. Because the internal fabric of the IEP has changed, activities that lead to its design and implementation have also changed. Fundamental to this shift is the underlying assumption that special educators, regular educators, and parents must collaborate and consult with one another on behalf of the student.</p>	<p>12. In order for regular education teachers, special education teachers, and speech-language pathologists to develop and implement educationally relevant and integrated IEPs, they need time to meet, share curriculum standards and goals, and determine appropriate instructional strategies. Consideration must be given to the students' communication needs in the development and modification of all IEPs. This increases the involvement of the SLP in the student's IEP process. Speech-language pathologists must understand the demands of the curriculum at all grade levels and across school, district, and state requirements. Student evaluation data must include information relevant to current classroom-based functioning. SLPs need time to do classroom observations and to collect authentic assessments that reflect the student's performance in the general curriculum and on current IEP goals.</p>
<p><u>13. Notice of interpretation:</u> Extent to which child will participate with nondisabled children. 300. (533). Appendix A to Part</p>	<p>13. To the maximum extent appropriate to the child's needs, each child with a disability participates with nondisabled children in nonacademic and extracurricular services and activities: All services and education placements under Part B must be individually determined in light of each child's unique abilities and needs, to reasonably promote the child's education success. Placing children with disabilities in this manner should enable each disabled child to meet high expectations in the future. IDEA's emphasis on access to the general curriculum is intended to ensure that special education and related services are in addition to, not separate from that curriculum. The requirements regarding services provided to address a child's present levels of education performance and to make progress toward identified goals reinforce the emphasis on progress in the general curriculum.</p>	<p>13. In all cases, placement decisions must be individually determined on the basis of each child's abilities and needs, and not solely on factors such as category of disability, significance of disability, availability of special education and related services, configuration of the service delivery system, availability of space, or administrative convenience. Rather, each student's IEP forms the basis for the placement decision. This affects the SLP workload as listed under Least Restrictive Environment and Connection to General Curriculum listed above.</p> <p style="text-align: right;">Sources: ASHA (1999b) and Hehir (1998).</p>

fulfill these expanded SLP roles. For example, SLPs in schools must now have expertise in areas that include, but are not limited to, language and literacy development, articulation and phonology development and disorders, fluency disorders, voice disorders, language-based learning disabilities including reading and writing disorders, expressive and receptive language disorders, feeding and swallowing disorders, augmentative and alternative communication, auditory processing disorders, traumatic brain injury, autism spectrum disorders, neurogenic disorders including cognitive impairment, deafness and hearing impairment, and linguistic and cultural diversity.

Known Effects of Caseload Size and Instructional Group Size in Special Education

Caseload Effects and Service Delivery Options Used With Students

ASHA's 2000 Omnibus Survey (ASHA, 2001c) and 2000 Schools Survey (ASHA, 2001e) describe speech-language practice as it is currently conducted in the schools. Despite IDEA's focus on collaboration and evidence that collaboration and consultation support notions of best practice, most treatment services continue to be delivered through a pullout model (average 23 hours per week), primarily with groups versus individuals. Consultation and collaboration currently take up an average of only 2 hours per week, with classroom-based/curriculum-based intervention averaging 1 hour per week. This limited involvement in collaboration, consultation, and classroom-based services appears to be due in large part to the major workload challenges identified by school-based SLPs: large caseload sizes; lack of time for planning, collaborating and meeting with teachers; and burdensome amounts of paperwork (e.g., ASHA, 2001a; Chiang & Rylance, 2000). ASHA NOMS data confirm that the vast majority of students with disabilities (up to 92%) receive speech-language intervention in pullout groups regardless of the disorder being treated. Two-thirds of students are seen for intervention two times per week, and more than 75% of those sessions are 21-30 minutes in length (ASHA, 2000a).

When data from the 2000 ASHA Schools Survey are compared to data from the 1995 ASHA Schools Survey (Peters-Johnson, 1996, 1998), there appears to be virtually no change in the service delivery options used by school SLPs in the past decade. Paralleling the 2000 survey data, the pullout group treatment model was the most common service provided in 1995 (total 86% of the time, 51% in group sessions and 35% in individual sessions).

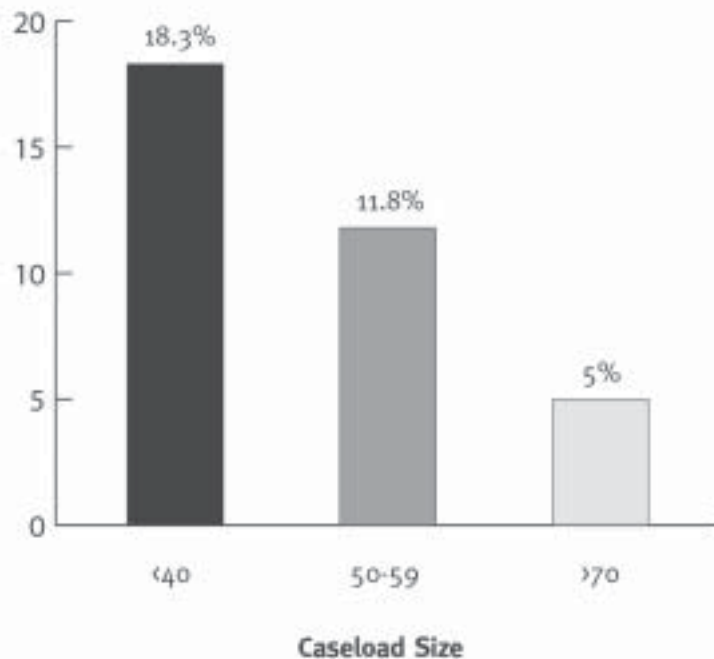
The NOMS data report reveals that caseload size appears to play a significant role in the way speech-language services are delivered (ASHA, 2000a; Karr & Schooling, 2001; Whitmire, Karr, & Mullen, 2000). Analyses indicate that two of the immediate impacts of increasing caseload size are a shift from individual to group treatment, and an increase in the size of the treatment groups. For SLPs with caseloads greater than 60 students, treatment groups of 5 or more were much more commonly used (31% of the time vs. 6% for caseloads under 40) and individual treatment was nonexistent (0% of the time). In contrast, children served by SLPs with fewer than 40 children were more likely (13%) to receive individual treatment than SLPs with larger caseloads. In addition, SLPs with caseloads fewer than 40 were more likely to use other service delivery models (classroom-based, collaborative consultation, etc.) to treat their students. These data suggest that a wider range of service delivery options is available to a student if the SLP has a caseload of fewer than 40 students. Figure 1 illustrates the relationship between caseload size and the percentage of students receiving individual treatment for speech sound production.

Current ASHA NOMS results are confirmed by other independent research. For example, Chiang and Rylance (2000) conducted surveys of a random sample of 210 Wisconsin school-based SLPs in one of the most comprehensive studies published on speech-language caseloads. As would be predicted, SLPs with large caseloads (over 40) conducted a high percentage of treatment in pullout/resource settings (68%), which they felt allowed them to offer treatment to the largest number of students in the least amount of time. Caseload also affected the type of intervention provided; SLPs with large caseloads tended to serve larger numbers of students in group settings (66%). The majority of respondents indicated that the size of their caseload had a critical influence on their ability to deliver an appropriate education to their students. These findings led the authors to make several recommendations to decision makers in state and local education agencies: (a) the IEPs and the needs of individual students must be given priority when choosing service delivery options; (b) caseloads should be of a size to allow SLPs to provide intervention, collaborate and co-teach, and complete the necessary paperwork in working hours; (c) caseloads of students with communication disorders should not exceed 40 under any circumstances; and (d) caseloads containing students with severe and complex disabilities (e.g., autism, cognitive disabilities, fetal alcohol syndrome, and severe developmental delays) require substantial reduction to provide appropriate services. These authors make the following conclusion:

“In a profession dedicated to serving children based on their disability needs, these trends sound warning alarms. Indeed, with the new and increased paperwork demands mandated by IDEA, the recent move for schools to bill other agencies, and an increase in the number of children with severe involved disabilities, a caseload of 40 strains even a dedicated professional. Based on the findings from this study, the tensions between more paperwork and quality services will only be exacerbated by increasing numbers of children” (Chiang & Rylance, 2000).

The effects of large caseloads on the service options chosen by special education professionals is not limited to school SLPs. Olmstead (1995) analyzed results from a survey of caseloads and working conditions for itinerant vision teachers. As caseloads increased, the teachers felt that the level of service on students' IEPs was determined primarily by how much time was available in their schedules, rather than according to student needs. Teachers also indicated that expanding caseloads had left insufficient time in the school day to conduct necessary duties such as adapting materials and meeting with teachers. Keith (1992) conducted a survey of randomly selected school psychologists. Results indicated that caseload size influenced the amount of time psychologists could spend on interventions: as caseloads increased, psychologists had

Figure 1.
Percentage of students receiving individual treatment for speech sound production by SLP caseload size.



less time to spend on direct intervention with students and virtually no time to meet with teachers. Just as important, teachers' ratings of psychologists' effectiveness were directly influenced by caseload size; the higher the caseloads, the lower the teachers rated the effectiveness of the psychologist. The studies reviewed here suggest that large caseloads limit the type of services that SLPs, special education teachers, and other related service providers give to students with disabilities, even though the intent of federal and state special education regulations is for service decisions to be based on students' individual needs.

Caseload Effects and Student Outcomes

Most research to date on the effects of caseload and instructional group size has looked at traditional pull-out service settings. There is a lack of research on the effects of caseload size on services delivered through classroom-based, collaborative, or indirect-consultative options. Therefore, the literature reviewed in this section focuses on pullout services in a "resource room" model. For information on the continuum of service options now considered best practices for speech-language intervention in school settings, the reader is referred to ASHA (1991, 1999, 2001d), Cirrin and Penner (1995), Eger (1992), Ehren (2000), Elksnin and Capilouto (1994), Prelock (2000), and Whitmire (2001).

Students With Learning and Other Disabilities

Larger caseloads naturally increase instructional group sizes and minimize opportunities for individualization of interventions (Russ, Chiang, Rylance, & Bongers, 2001). Recent research has supported a link between instructional group size and student engagement for students with moderate disabilities (Algozzine, Hendrickson, Gable, & White, 1993; Thurlow, Ysseldyke, Wotruba, & Algozzine, 1993). For example, Thurlow et al. (1993) examined the effects across different student-to-staff ratios (1:1, 3:1, 6:1, 9:1) for students with learning and behavioral disabilities. These investigators found that groups with lower ratios (1:1 and 3:1) had significantly higher percentages of time when teachers used more effective instructional behaviors, and significantly higher percentages of time in which students made active academic responses. These included communication responses such as talking appropriately, answering academic questions, and asking academic questions. Better attending to task and less inappropriate behavior from students were also observed in lower ratio groups. These authors concluded that special education students in smaller instructional groups have more opportunities to participate, resulting in an increase in the frequency of

participation. Forness and Kavale (1985) studied the effects of class size on the attention, communication, and disruption of children with mental retardation. Smaller instructional groups were associated with higher levels of verbalization and gestures, leading the researchers to conclude that there was more opportunity in smaller classes for interactive communication and less emphasis on activities such as passive listening and individual seatwork.

There also appears to be a relationship between instructional group size and academic achievement (Algozzine et al., 1993; Gottlieb & Alter, 1997; Thurlow et al., 1993). Torgeson, Wagner, Rashotte, Alexander, and Conway (1997) found that students with severe reading disabilities in resource rooms achieved much lower gains than did matched students receiving 1:1 instruction. Gottlieb and Alter (1997) studied the impact of increases in instructional group size when New York City schools were mandated to increase the number of students from 5 to 8 in resource rooms and speech-language groups. Even though speech-language providers increased the overall number of students seen by about 25%, surveys indicated that children were grouped to accommodate scheduling considerations rather than to meet their individualized language learning needs. There was also a significant reduction in the number of children able to be seen individually. For special education teachers and SLPs there was a marked decrease in time to collaborate and attend regularly scheduled meetings with general education teachers. No data were collected on how the increase in group size affected effectiveness of speech-language services; however, data did show a substantial decline in reading achievement scores of resource room students with the increase in group size. The authors stated that they had little reason to doubt that speech-language services were also delivered less effectively under larger instructional group conditions.

Although research has shown that small group instruction can be effective for teaching some students with severe disabilities (Fink & Sandall, 1980; Oliver & Scott, 1981; Reid & Favell, 1984), it also appears that instructional time is a critical variable that affects the performance gains of severely and profoundly handicapped children (Snart & Hillyard, 1985). The student-to-staff ratio directly affects the amount of instructional time available in classrooms. Snart and Hillyard (1985) studied effective teaching environments, and found that a 2:1 student-to-teacher ratio was the point at which teachers were able to provide more instructional time than noninstructional time/activities. Compared to other student-to-staff ratios, the 2:1 ratio resulted in increased performance for these students with severe

disabilities. Similar results were obtained by Kemps, Walker, Locke, Delquadri, and Hall (1990) who found that for students with autism in a public school setting, instruction in small groups with student-to-staff ratios of between 1:1 and 3:1 were effective for teaching word recognition skills. These data from the studies reviewed in this section suggest that students served in smaller instructional groups (with student-to-teacher ratios of 3:1 or less) have improved performance and achievement. This appears to be true of students across a wide range of disabilities, and student communication responses, in particular, seem to be facilitated by lower group size.

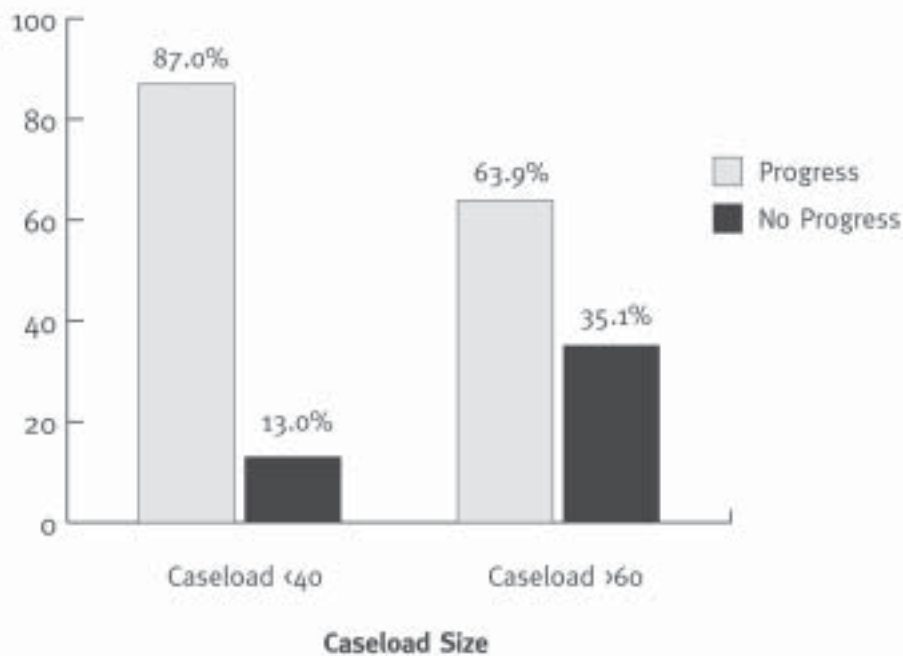
Students With Communication Disorders

NOMS data (ASHA, 2000a, 2001c) suggest that student communication outcomes appear to be influenced by caseload size. In comparing the proportion of students in kindergarten through twelfth grade who

made at least one level of progress on articulation goals, the data reveal that students on caseloads of fewer than 40 were more likely (87%) to make measurable progress than those on caseloads of 60 and above (63%). This relationship is shown in Figure 2.

Additionally, NOMS data suggest an interaction between an SLP’s caseload size and the teachers’ perceptions of whether speech-language intervention improved students’ reading comprehension and written language skills (Karr & Schooling, 2001). As illustrated in Figure 3, for children receiving treatment from SLPs with caseloads fewer than 40, 90% of regular education teachers reported that these children demonstrated improved reading skills that were related to the services the SLP had provided. When the caseload size increased to 70, only 60% of the teachers felt that speech-language pathology services made a difference in students’ reading abilities.

Figure 2.
Progress on Speech Sound Production FCM by caseload size.



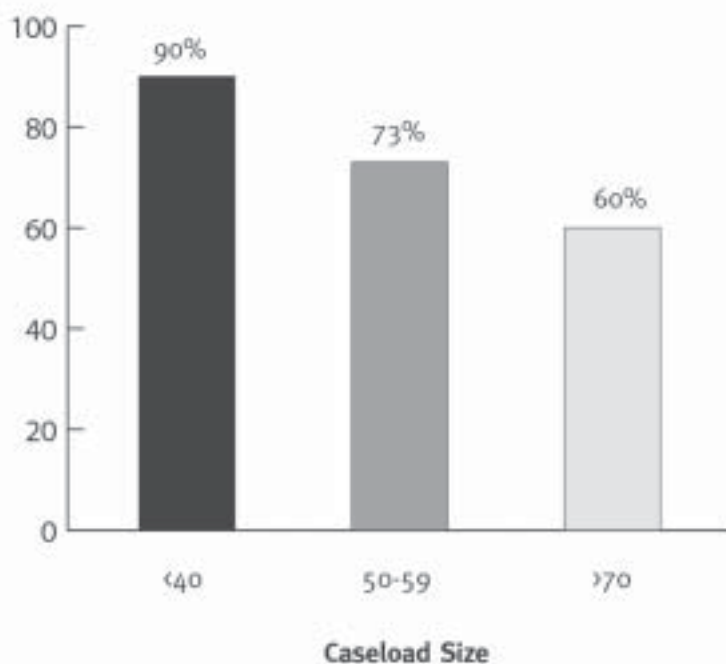
As previously discussed, group treatment is much more commonly used by SLPs with large caseloads. ASHA NOMS data appear to demonstrate that this shift from individual to group treatment has a negative effect on student outcomes in treatment (Karr & Schooling, 2001). The data presented in Figure 4 reveal that children were more likely to make measurable progress in speech sound production skills when they received individual treatment as opposed to group treatment. A similar pattern was found for preschool children (ASHA, 2001c): 78% of children who received individual intervention services made significant progress in articulation, compared with 57% who received group treatment. Larger caseloads appear to be related to slower progress for children in treatment.

ASHA NOMS data (ASHA, 2001c) suggest that group treatment is an effective service delivery choice

for preschool children with goals in the area of spoken language comprehension. However, group size is one factor that appears to affect students' verbal communication in ways that might in turn promote language development. Several studies lend some support to this idea. Lowenthal (1981) studied the effect of small-group instruction in comparison to large-group teaching as an approach to improving the oral language of language-delayed preschoolers. Students were assigned to control (large) or small treatment groups. Children in groups of three made significantly greater gains in receptive vocabulary, auditory comprehension, and verbal ability than children in control groups that had ten children. McCabe, Jenkins, Mills, Dale, Cole, and Pepler (1996) found differences between playgroup sizes of two and four in the expressive language that children with disabilities used with peers. Children with disabilities used significantly

Figure 3.

Percentage of teachers responding "Strongly Agree" or "Agree" to the following statement: "The student demonstrates improved pre-reading/reading/reading comprehension skills."



Source: ASHA NOMS

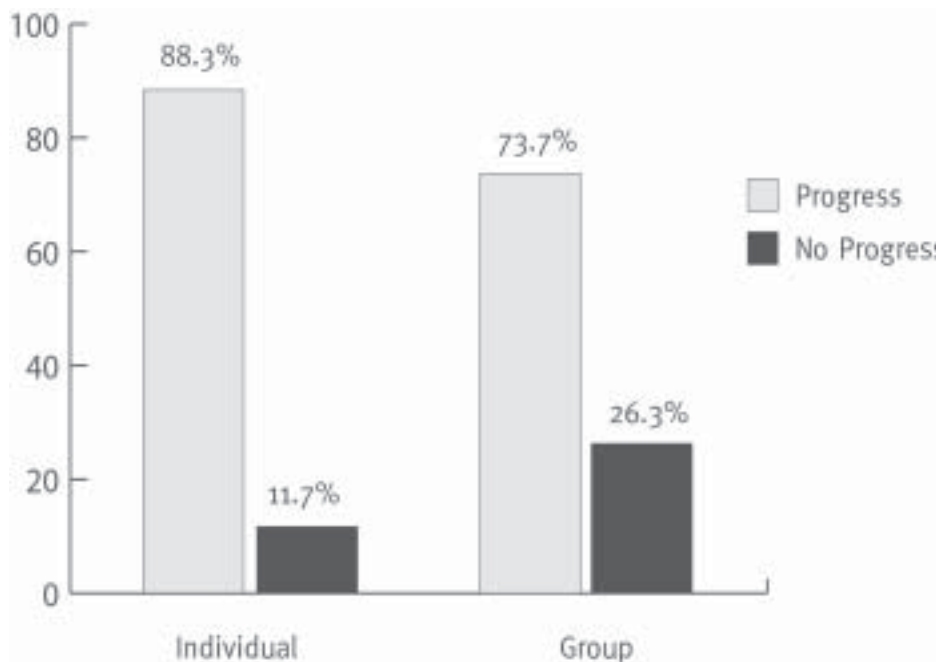
more utterances per minute when playing in groups of two. In the groups of four, the children had fewer utterances but used more different words.

Increased practice with talking appears to facilitate vocabulary growth and complex sentence production in children with disabilities (Hart & Risley, 1980). However, young children with communication disabilities talk approximately half as much as their typically developing peers, and are much less responsive to inquiries from teachers and peers (Warren & Rogers-Warren, 1982). Taken together, these results suggest that children whose language is least well developed tend not to engage in the practice they need for language development. The studies reviewed in this section suggest that intervention for children and adolescents in small groups (3:1 or less) provides more opportunities for conversational participation and verbal communication. It follows that the use of smaller student-to-staff ratios in speech-language intervention can maximize talking practice and lead to improved communication outcomes for students with disabilities.

The research reviewed in this section on effects of caseload and group size supports several conclusions. Education teams must consider these results when determining which service options can best meet individual student needs.

- Large caseloads affect available service options. Large caseloads relate to less individual treatment, more group treatment, and an increase in the size of treatment groups.
- Larger caseloads appear to minimize opportunities for individualization of interventions.
- When instructed in smaller size instructional groups, students with a wide range of disabilities are more engaged and have better student outcomes. Among desired student outcomes, communication skills, in particular, appear to be positively influenced by small treatment group size, and negatively influenced by larger treatment group size. This includes students with severe disabilities who verbalize and use gestures to communicate more in small group settings.

Figure 4.
Progress on Speech Sound Production by Service Delivery Model



- Students on large caseloads appear to take longer to make progress on communication skills.

Caseload Effects and Working Conditions Related to Teacher Attrition and Shortages

The current trend of increasing caseloads and the expanded responsibilities of teachers in special education, including speech-language pathology, appear to be important factors contributing to high rates of teacher attrition. It has been predicted that if the current attrition rates continue, it is likely that some districts will not be able to meet the federal requirements of IDEA to ensure that all students with disabilities are provided with a free, appropriate public education (Wisniewski & Gargiulo, 1997). For speech-language pathology, over 50% of respondents to the 2000 ASHA Schools Survey reported a shortage of qualified SLPs in their school district (ASHA, 2000b). Effects of this shortage on service delivery, as indicated by the respondents, included increased caseload (80%), decreased opportunities for individual services (62%), and decreased quality of service (58%). Findings on school SLP shortages from 1995 are remarkably similar to current research. ASHA survey data reported by Peters-Johnson (1996, 1998) indicated that 60% of respondents reported SLP shortages in their districts. The major effects of the shortages on services to students were increased caseload and an accompanying decrease in the quality of service.

The majority of respondents to the ASHA 2000 Schools Survey on SLPs' working conditions reported that their greatest challenges were burdensome paperwork (88%); lack of time for planning, collaboration, and meeting with teachers (81%); and large caseload (60%). These results are similar to those of the 1995 ASHA Schools Survey (Peters-Johnson, 1996, 1998).

State education agencies are beginning to examine the impact of large caseloads on speech-language pathology services for children in schools. There appears to be a relationship between working conditions and SLP shortages. For example, special education administrators and SLPs in schools and health care settings were recently surveyed by the Ohio Legislative Office of Education Oversight (1999). Results indicated that schools had difficulty finding SLPs primarily because the working conditions in schools were less favorable than in most health care settings. Specifically, this study indicated that the public school work environment often included larger caseloads: in schools SLPs served over 50 students in groups; in health care they served between 16 and 30 clients in individual treatment sessions. School SLPs also reported that paperwork for reimbursement for treatment

services from Medicaid was particularly burdensome. Data from this study also confirmed results from the 2000 ASHA survey on how SLP shortages affected students. When shortages occurred, approximately 60% of SLPs and school administrators surveyed in Ohio reported reduced frequency of intervention sessions; 57% reported reduced duration of sessions; 30% reported that students went without services; and 20% stated that students received intervention services from noncertified staff. Only 13% of respondents reported that students were not affected by SLP shortages.

Several studies have looked specifically at job satisfaction in school SLPs (Banks & Necco, 1990; Chiang & Rylance, 2000; Goldberg, 1993; Miller & Potter, 1982; Pezzeri & Oratio, 1991). These studies have consistently shown that public school SLPs with large caseloads, increased paperwork, and funding cuts are particularly susceptible to burnout because they do not have the time to give each client the full attention needed. As the volume of workload or caseload increases, the degree of job burnout increases. These are the same factors that recent studies found to contribute to personnel shortages of SLPs in schools (e.g., Ohio Legislative Office of Education Oversight, 1999).

Chiang and Rylance (2000) researched school SLPs' perceptions of working conditions. With specific regard to caseloads, 75% reported that caseload affected job satisfaction; 81% indicated that caseload affected their job effectiveness; 83% reported that caseload affected the type of intervention used; 83% reported that caseload affected their ability to engage in collaboration with other teachers. These authors concluded that SLPs' responses clearly pointed to professional responsibilities that were being met minimally. These open-ended responses capture the majority of the respondents' attitudes on the current state of caseload and workload issues:

- "Time is the issue."
- "It is impossible to provide appropriate treatment for students on a large caseload while doing paperwork, calls, and meetings."
- "Caseload sizes are too large to truly address students' IEP goals appropriately."

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Appendix A Caseload Statistics, ASHA-Certified School-Based SLPs by State (Source: 2000 ASHA Schools Survey)

State	Median	Mean	Standard Deviation	Minimum	Maximum	# of Surveys Returned
Alaska	55	55	17	15	88	28
Alabama	50	52	13	20	85	44
Arkansas	48	50	11	35	80	31
Arizona	55	55	12	20	100	50
California	60	60	14	24	85	44
Colorado	60	60	16	24	100	39
Connecticut	47	48	16	15	85	46
District of Columbia*	-	-	-	-	-	1
Delaware*	-	-	-	-	-	24
Florida	64	63	26	15	100	40
Georgia	55	54	8	36	80	44
Hawaii	50	54	15	29	105	29
Iowa	45	47	12	16	80	44
Idaho	60	64	18	35	110	31
Illinois	60	57	18	20	95	48
Indiana	75	77	15	45	107	47
Kansas	47	46	12	24	75	42
Kentucky	62	64	17	28	110	42
Louisiana	48	44	15	15	85	33
Massachusetts	50	51	17	18	100	42
Maryland	60	61	16	18	100	46
Maine	45	44	8	30	60	41
Michigan	55	55	11	24	75	39
Minnesota	40	42	12	18	90	63
Missouri	50	51	15	15	82	40
Mississippi	58	54	14	15	85	45
Montana	50	51	10	35	80	31
North Carolina	55	53	14	25	90	49
North Dakota	32	35	10	23	65	37
Nebraska	50	48	14	25	75	35
New Hampshire	40	43	18	15	100	37
New Jersey	55	53	17	18	95	57
New Mexico	44	43	11	15	80	48
Nevada	60	58	13	30	92	31
New York	50	47	17	15	80	38
Ohio	60	64	15	31	110	51
Oklahoma	55	54	12	20	86	42
Oregon	56	59	15	30	105	39
Pennsylvania	60	59	17	30	95	45
Rhode Island	55	57	15	30	90	32
South Carolina	60	58	9	25	70	47
South Dakota*	-	-	-	-	-	18
Tennessee	59	58	20	20	100	48
Texas	60	64	17	25	110	39
Utah	61	64	16	35	110	35
Virginia	55	56	13	20	85	57
Vermont	40	46	19	15	90	36
Washington	57	58	11	33	90	64
Wisconsin	37	38	9	20	70	47
West Virginia	50	50	10	15	65	47
Wyoming	47	46	13	25	90	26
All states combined	53	54	16	15	110	2067

*State-by-state data are not reported for states in which fewer than 25 survey responses were received.

Appendix B Court Decisions and Legislation Affecting Speech and Language Services in the Schools.

Date	Court Case/ Legislation	Education Implications	Effect on SLP Workload
1954	Brown v. Board of Education	States may not deny an education to some students but provide it to others. The “separate but equal” education doctrine from earlier cases was set aside.	Discrimination against students based on race, religion, gender, or disability is not allowed. All students have the right to a public education.
1971	PARC v. Commonwealth of PA.	This case provided students with disabilities full access to an education, stipulating that placements in regular classrooms in public schools were preferable.	All students have a right to education in a regular public school, without regard to the severity of the disability. Many more children with severe and multiple disabilities begin to attend public schools. The role of the SLP in schools expands to include services for language disorders.
1972	Mills v. D.C. Board of Education	School districts are prohibited from denying services to children and adolescents with disabilities because of inadequate resources.	Students with speech and language disorders cannot be denied services because of lack of district resources.
1982	Board of Education v. Rowley	The United States Supreme Court set the standard for determination of FAPE. Special education must provide opportunity for students to receive educational benefit.	SLPs must work with other team members to determine students’ strengths and needs and plan an education program designed to provide educational benefit.
1983	Roncker v. Walter	Cincinnati Public Schools were ordered to place a multi-handicapped student in the public school system rather than a separate state system for individuals with severe disabilities.	Students with severe disabilities have a right to be educated in a regular school building. Multi-handicapped students require more intensive services, and planning time with team members to address classroom and assistive technology needs.
1988	Timothy W. v. Rochester School District.	The court ruled that schools could not exclude handicapped children and adolescents from a public education on the basis that they are uneducable.	No child is too severely disabled to receive speech and language services. Multi-handicapped students require more intensive services, and planning time with team members to address classroom and assistive technology needs.
1989	Daniel R.R. v. State Board of Education	The court set guidelines for provision of supplementary aids and services to modify the regular classroom in order for the child to receive educational benefit in the least restrictive environment (LRE).	SLPs must consider providing services in the LRE for all students on the caseload, including services in the general education classroom and curriculum. This resulted in an increase in the time needed for collaboration with general education teachers, development of accommodations, and student progress monitoring activities.
1993	Oberti v. Board of Education of Clementon School District	The court ruled that school districts bear the burden of proof when arguing that a student will not receive any educational benefit from placement in a general education classroom.	SLPs must team with parents and teachers to serve students in the general education classroom, document student progress, and design prereferral interventions. SLPs must offer a continuum of speech-language intervention services.

Date	Court Case/ Legislation	Education Implications	Effect on SLP Workload
1994	Irving Independent School District V. Tatro	School districts must hire specially trained personnel (e.g., physical and occupational therapists, SLPs) if needed to ensure that students with disabilities participate to the fullest extent possible in inclusive settings.	This decision specifically names related service personnel such as SLPs as specialists who must be hired if it has been determined that students need speech and language services.
1994	Holland vs. Sacramento Unified School District	The court established a four-factor test to consider when determining appropriate placement for students in general education classrooms.	SLPs need time to collect information on how students with disabilities function in general education classrooms.
1973	Section 504 of the Rehabilitation Act	Discrimination on the basis of disability was prohibited in any system receiving federal financial assistance.	SLPs may be asked to evaluate and/or consult on cases where students are not identified as having a communication disability. Time is needed to consult with school teams and to provide accommodations when appropriate.
1975	PL 94-142	The Education for All Handicapped Children Act required all schools to provide free, appropriate public education for all children.	The emphasis on specially designed instruction to meet the unique needs of each child with a disability increased the roles and responsibilities of the SLP.
1990	Americans With Disabilities Act (ADA PL-101-336)	Discrimination on the basis of disability is prohibited. Reasonable accommodations must be made in public and private settings for individuals with disabilities.	Students with speech-language disorders have the right to accommodations in order to access the regular education setting. SLPs need time to collaborate with teachers and other team members to ensure appropriate accommodations that support students' education programs.
1990	Individuals with Disabilities Act (IDEA PL 101-476)	This law added disability categories (autism, traumatic brain injury), transition services for adolescents, and assistive technology services.	All of the additions are areas that require intensive SLP services. Students in these disability categories typically require additional time and services due to the severity of the disability.
1997	IDEA Amendments of 1997 (PL 105-17)	These amendments strengthened the rights of parents and mandated that special education services be linked to the general education curriculum.	SLPs must link their services to their students' participation and progress in the general education classroom and curriculum. Coordination of efforts with general education teachers, planning, and adapting curriculum materials increases time requirements for SLPs.

Sources: Moore-Brown and Montgomery, 2001, p. 21-39; Heward, 2000.