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approximately 15%, forcing local school districts to spend more of the general education budget on special education services.

The lack of federal funding for special education and related services often pitted general education and special education services against each other at the local level. Local school boards had to make difficult decisions about where local tax dollars would be used. Local school districts facing the mandate of inclusive practices had to start examining the practical issues involved, such as those identified by Burnette (1996). Burnette's relevant questions are summarized as follows:

- Are there enough resources to provide adequate aids, support, related services and accommodations tailored to each individual?
- Is the school building accessible and of physical barriers?
- Do educators have time set aside for solving problems, planning, collaboration, and group discussion?
- Is it possible to keep the staff-to-student ratio low?
- Does the school atmosphere celebrate diversity?
- Does the curriculum allow for the diverse needs of students?
- Does the school environment and curriculum foster student interactions and peer support?
- Are educators properly trained to provide an inclusive setting and also address conflict resolution?
- Does the school district provide staff development?
- Does the school provide specialized support systems and personnel?

Institutions of higher education also were challenged to keep pace with the evolving mandates of the federal laws. General educators claimed that they had not been adequately trained to deal with students with disabilities. Likewise, special educators, SLPs, occupational therapists, and physical therapists were reluctant to give up their isolated therapy rooms, which

appeared to be more conducive to the students' individualized learning. Nevertheless, parent advocates continued to push for inclusive practices, with the vision of their children's "fitting in" and becoming productive members of society. Gradually, more effective inclusive practices were developed through collaborative efforts between general educators, special educators, support services, the community of learners, parents and legal guardians, and local businesses. Ehren (2000) cautioned that school-based SLPs must avoid becoming tutors. A remediation focus must be maintained when inclusive practices are used. The IEP team needs to focus on what it is that makes the SLP uniquely trained to conduct this educational activity that no other educator or program assistant has the knowledge, skills, or dispositions to execute.

### **Inclusive Practices and Accountability**

The No Child Left Behind Act (NCLB) of 2002 placed a strong emphasis on accountability. The President's Commission on Excellence in Special Education (PCESE, 2002) described the purpose of NCLB: "On January 8, 2002, President George W. Bush signed the *No Child Left Behind Act* into law. . . . We became a nation committed to judging the schools by one measure and one measure alone: whether every boy and every girl is learning—regardless of race, family background or disability status" (p. 1). The National Center on Educational Outcomes (NCEO, 2002) applauded NCLB because it required students with disabilities to reach high academic standards. NCLB contained four basic education reform principles: (1) accountability, (2) increased flexibility and local control, (3) strengthening teacher quality, and (4) evidence-based practice.

### **Accountability**

Before NCLB, students with disabilities often were excluded from statewide and districtwide assessments. Local school boards typically used

those assessment results to identify the district's strengths, challenges, and needs and created school district policies accordingly. Parents of students with disabilities were concerned that the needs of their children and adolescents were being ignored in this important policy-making procedure because students with disabilities were being excluded from the assessment process. NCLB held schools accountable for the educational achievement of students with and without disabilities by requiring all students to participate in assessment programs. As a result of the NCLB mandates, school-based SLPs began to collaborate on an educational team to create assessment accommodations and alternative assessment tools, as needed, that allowed students with disabilities to participate in the statewide and districtwide assessments. As stated by the IDEA Partnership (2000), assessment accommodations were defined as an alteration in the way a test is administered or the way a student takes a test. Such accommodations, however, do not alter the content of the test or the performance expectation. Five types of

assessment accommodations defined by the IDEA Partnership are summarized in Table 1-2.

The types of accommodations allowed on statewide tests may vary from state to state. State departments of public instruction provide guidelines regarding the type of accommodations allowed.

NCLB also influenced the way IEPs were written. In the post-NCLB era, IEP goals were written in language that reflected the academic content standards established by each state. The academic content standards define what all students should know and be able to do to be considered proficient at each grade level. NCLB introduced the concept of **adequate yearly progress (AYP)**. Each state was required to identify the regular incremental improvement required from year to year, with all students reaching a proficient status within 12 years, by the 2013-2014 academic year. The results of state assessments for students with disabilities must be included in the determination of AYP, along with the results of all other students, but also must be considered separately.

**Table 1-2.** Assessment Accommodations

Accommodation	Definition	Example
Timing	Changes in the duration of the testing	A child may need extended time to complete the test, or the test may be broken up into smaller units to match the child's endurance level.
Scheduling	Changes in when the testing occurs	A student may need to take the test at a different time of the day because of medication schedules that interfere with performance.
Setting	Changes in where the assessment is given	The student may be allowed to take the test in a study carrel, rather than in an open classroom.
Presentation	Changes in how an assessment is given	The test may need to be provided in Braille, or key words or phrases in the directions may need to be highlighted. Using larger print or reading the directions out loud to the child also may be required.
Response	Changes in how a student responds to an assessment	The student may be allowed to write an answer on special paper with guidelines or to point to an answer, rather than filling in a bubble-sheet, or may be permitted to use a computer or assistive technology to respond.

Source: IDEA Partnership (2000).

This separate consideration is called **disaggregated results** for the disability subgroup. Similar disaggregated results are required for English language learners (ELLs), for students from families of low socioeconomic status, and for various ethnic groups. Every group of students, however, must demonstrate adequate progress if the school as a whole is to make its AYP target. Schools that do not meet AYP targets suffer adverse consequences (NCEO, 2002).

### Increased Flexibility and Local Control

The IDEA legislation moved children with disabilities out of institutions and into classrooms and from the outskirts of society to the center of focus in education. Unfortunately, IDEA also required excessive paperwork and meticulous documentation of procedures. The spirit of NCLB was to place more emphasis on student outcomes based on AYP, rather than focusing on documentation related to due process, procedural safeguards, and parents' rights. NCLB allowed schools to spend up to half of their federal education dollars based on local needs, rather than on the federal programs (e.g., Title I, Safe and Drug-Free Schools, Teacher Quality State Grants, Educational Technology, Innovative Programs) for which those dollars were originally earmarked (NCEO, 2002).

### Parental Choice

NCLB advocated giving parents the choice to remove their students from schools that were not meeting AYP to schools that were higher-performing. NCLB also advocated giving parents the choice to remove students from unsafe schools to safer schools. The idea of giving parents school vouchers to remove their students from public schools and enroll them in private or parochial schools gained momentum through NCLB.

### Highly Qualified Teachers

The PCESE (2002) noted that many students in America were being placed in special education

programs because they were not able to read. The commission questioned whether such placements resulted from true disabilities or from inadequate teaching. NCLB mandated that public schools hire only qualified teachers for Title I –supported programs as of the 2002–2003 school year and develop a plan to have all teachers be highly qualified by the end of the 2005–2006 school year (Ruesch, 2004). NCLB left it up to each state, however, to define what is meant by “highly qualified.”

### Evidence-Based Practice

The NCLB act required that all school districts use only those teaching strategies that are rooted in scientifically based research. According to Ruesch (2004), the term *scientifically based research* embodies the following:

- Research that involves the application of rigorous, systematic, and objective procedures to obtain reliable and valid knowledge relevant to education activities and programs and includes research that:
  - Employs systematic, empirical methods that draw on observation or experiment
  - Involves rigorous data analyses that are adequate to test the stated hypotheses and justify the general conclusions drawn
  - Relies on measurements or observational methods that provide reliable and valid data across evaluators and observers, across multiple measurements and observations, and across studies by the same or different investigators
  - Is evaluated using experimental or quasiexperimental designs in which individuals, entities, programs, or activities are assigned to different conditions and with a preference for random-assignment experiments, or other designs to the extent that those designs contain within-condition or across-condition controls

but use a 6-week rotation schedule, rather than a monthly rotation. Another option would be to designate one day or one-half day per week for workload-related activities.

### ***Weighted Formula***

A **weighted formula** can be used to determine caseload sizes. The caseload numbers take into account time to do the following workload activities: professional collaboration, parent contacts, inservice training, service delivery options, supervision and communication with support staff, travel time, schedule issues, planning time, service on building assistance teams, committee work, duties (e.g., hallways, bus, playground, lunchroom), development of alternate assessments, and development of alternative curricula and materials.

### ***Compensation Language***

**Compensation language** can be written into the master contract for psychologists, diagnosticians, and SLPs. SLPs are assigned caseloads no larger than a district-determined maximum number without additional compensation. In the event that an SLP is assigned a caseload that exceeds the maximum number per a monthly caseload report, that SLP receives compensation in the amount of 3% of his or her salary per student. Such compensation is paid in biweekly units on a quarterly basis until such time as the child is dismissed through the IEP process or until the date the child leaves the school. SLPs also are provided one-half day per week to deal with other workload activities. In appropriate cases, overload assignments may result in reduction of preparation time. Choosing between compensation and assistance by additional staff is at the school district's discretion.

### **Success Story: A Workload Analysis Approach Applied to a Weighting System**

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Heidi Notbohm, an SLP practicing in Middleton, Wisconsin, is a seasoned professional with more than 25 years of public school experience. Her

experience and wisdom told her that, if she wanted to help her school district make the conceptual shift from caseload to workload, she would have to work within the existing system. Nothom's employer, the Middleton/Cross Plains Area School District (MCPASD), used a weighted workload formula for programs that serve students with cognitive disabilities, learning disabilities, and behavioral disabilities, but no similar formula was in use for speech-language programs.

Notbohm and some of her colleagues attended the presentation on "A Workload Analysis Approach to Caseload Standards in Schools" at the 2003 ASHA Convention. This motivated Notbohm to form an ad hoc committee within the group of SLPs employed in the school district. The ad hoc committee worked diligently during the 2003-2004 academic year; provided monthly progress reports to all district SLPs; and sought their input and feedback every step of the way. As a result of feedback from the larger group, the committee learned that workload activities differed at the elementary and the secondary levels. As a result, weighting categories were defined differently for the two levels.

When the conceptual framework was built, Notbohm and her committee members met with Erin Kuehn, the MCPASD Director of Student Services, and Sherri Cyra, an elementary school principal in the school system. Cyra was a strong supporter of the workload-weighted formula. She had recently changed her principalship from one elementary school to another and could see a dramatic difference in workload because of the differences in the student populations between the two schools. Cyra agreed to be the information liaison to all of the other principals in the school district. On receiving input from the principals and Erin Kuehn, Director of Student Services, additional modifications were made to the weighted workload formula. The final draft was distributed to all of the SLPs in the school district. Each SLP was asked to apply the weighted workload formula to his or her current situation.

Interjudge reliability was their key to success. At a districtwide speech-language pathology meeting, the professionals compared and contrasted their weightings. Questions were answered and clarifications were given. Then the ad hoc com-

mittee presented eight case studies to the SLPs in the district. These professionals studied each case as it was presented on overhead slides and rated the workload associated with that case using the weighted formula. When all of the SLPs rated all eight cases similarly, the committee recognized that interjudge reliability had been attained. The MCPASD ran a district-wide pilot project during the 2004–2005 school year. New contract language addressing the use of a weighted workload formula was developed for the school district's master contract. Each academic year, all of the SLPs in the school district collaborate with the elementary, middle school, and high school coordinators to create a weighted workload. All full-time equivalent (FTE) allocations are determined based on the weighted workload formula. For example, a caseload maximum may reflect the number 40; however, there may actually be only 37 students on the caseload because of the workload attached to those 37 students may yield a heavier weighting. Notbohm reported, "The administrators are beginning to understand the workload weighted system and to appreciate the value of the variety of services the SLPs provide with, for, and on behalf of students. It's amazing how successful we can be when the speech-language pathologists, administration, and teachers' union all work together" (H. Notbohm, personal communication, May 9, 2005). The MCPASD Elementary and Secondary Severity Rating Scales are reproduced, with permission, as Appendix 2-1 at the end of this chapter.

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### Summary

Caseload size has challenged school-based services since the first Education for All Handicapped Children Act was passed in 1975. The roles and responsibilities of the SLP have expanded over time as legal mandates have been added. In the post-IDEA '04 era, SLPs need to think in terms of workload responsibilities, not just direct service for the caseload. Research clearly shows negative effects of large caseload on student outcomes. SLPs must use a student-centered approach. It is not possible to apply one simple solution to case-

load size, because each SLP's workload is uniquely defined by the IEPs of the students on that caseload. It is possible, however, to apply the same workload analysis approach to any caseload. A workload analysis approach to establishing caseload standards in the schools may appear time-consuming to the professional who is already overloaded. Nevertheless, a majority of the professionals who have used a workload analysis approach have found it to be useful, and many unique solutions and success stories have been documented.

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### Questions for Application and Review

1. How do large caseloads affect service delivery options used by SLPs in school-based programs?
2. How do large caseloads affect professional activities that are mandated?
3. How do large caseloads affect students' learning outcomes?
4. How do large caseloads affect burnout and attrition?
5. How do large caseloads affect compliance with IDEA '04?
6. How is *caseload* defined?
7. How is *workload* defined?
8. What are the four major premises of workload?
9. What are the four quadrants of a balanced workload?
10. Explain why one solution cannot be applied to every workload problem.

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### References

- American Speech-Language-Hearing Association. (1984). Guidelines for caseload size and speech-language services in the schools. *Asba*, 53–58.
- American Speech-Language-Hearing Association. (1991). A model for collaborative service delivery for students with language-learning disorders in the public schools. *Asba*, 33(Suppl. 5), 44–50.
- American Speech-Language-Hearing Association. (1996). Scope of practice in speech-language pathology. *Asba*, 38(Suppl. 16), 16–20.

may continue to write short-term objectives or benchmarks as a way of reporting progress toward the IEP goal.

### **A Historical Perspective: Ongoing Evolution of Individualized Education Programs**

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It is useful for the SLP to know how IEPs have evolved over the years, because not all school districts have kept pace with the changes. Thus, the SLP may encounter IEPs that look very different when a child transfers from another state or even another school within the same district. In an effort to continue the quest for quality, as well as equality, of services for children in special education and related services, advocates and parents have kept a focus on goal writing since IDEA was authorized in 1990. Before 1990, IEP goals were written in general terms and used nonspecific language such as *improve*, *enhance*, or *develop*. Objectives were used instead of benchmarks. At least two objectives were written for each goal. Each objective contained a condition, target behavior, and criteria. No baseline was included, no direction of behavior was required, and the accountability for the criteria was nonspecific (e.g., based on teacher-made test, classroom observation, or parent report). The following example presents a goal and two benchmarks written in the 1990s style:

*Goal:* The student will improve oral communication skills.

*Objective:* When given a model-imitation task, the student will produce a mean length of utterance of 3.5, 60% of the time based on classroom observations.

*Objective:* When given an elicitation task, the student will produce a mean length of utterance of 3.5, 75% of the time as measured by a teacher-made test.

When IDEA was reauthorized in 1997, more emphasis was placed on the LRE. IEP goals had to be curriculum based and reflect the LRE. Bench-

marks were allowed instead of objectives because the goal had to relate to education standards delineated by each state. The IEP goals had to include a direction of behavior (e.g., increase, decrease, maintain). The goals had to include baseline data taken from the PLEP. The goals also had to include criteria that were observable and measurable. The benchmarks had to be written in observable, measurable terms. The following example presents a goal and two benchmarks written in the IDEA '97 style:

*Goal:* When given visual cues, Juan will increase speech intelligibility from 40% to 70% while engaged in classroom communication learning activities.

*Benchmark:* Juan will produce /k, g/ sounds at the beginning and end of words in 8 out of 10 trials while reading a 200 word passage from a grade level text that has highlighted letters.

*Benchmark:* Juan will produce /k, g/ sounds in the initial, medial, and final positions of words and in consonant blends in 8 out of 10 trials while reading a 200-word passage from a grade level text that does not have highlighted letters.

IDEA '04 specifies that not every IEP team member must be present at every IEP meeting if the parents and LEA agree that the member's attendance is not necessary. Also, an IEP may be modified without convening a meeting if the parents and IEP team members agree to the changes. Court cases continue to shape the extent and quality of special education and related services and provisions within the IEP. An excellent resource for keeping abreast of new changes is the IDEA website (<http://idea.gov>).

### **Summary**

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Although the SLP working in a medical setting or private sector may diagnose and treat an impairment, the process is not so simple in the school setting. The assessment and evaluation process is

to words and ideas that might otherwise go unnoticed.

5. *Follow-up activities*: Following the SSR interaction, teachers offered students materials and opportunities to help reinforce newly acquired vocabulary. Art activities, flannel board materials, dramatization, and play provided occasions to practice new ideas and concepts within the classroom setting.
6. *Summarizing*: Following SSR, teachers as well as students summarized the story. Summarization required students to use new vocabulary in a meaningful context. It also provided teachers with an opportunity to review vocabulary and concepts, while providing alternate wording to help students with vocabulary understanding. (Gormley & Ruhl, 2005, pp. 11-13)

### **Pull-Out Program Model**

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In the classic pull-out model, the SLP removes the child from the general education classroom and works in a separate, isolated environment in either a one-to-one setting or small group setting. The SLP may use materials from the general education curriculum and intertwine the program goals into the activities that focus on curriculum-based content. The SLP also may use specialized materials that focus specifically on the IEP goal. Sessions are held from 1 to 5 days per week, and the amount of time per session may range from 10 to 90 minutes, depending on the specific needs of the child. If the IEP team determines that the pull-out format is the most appropriate model to meet the student's needs, then a rationale statement describing why the student must be removed from the regular education classroom must be included on the student's IEP.

### **Selecting the Intervention Approach**

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Each new service delivery format, as described, has inherent strengths and is associated with specific

challenges. The self-contained and the resource room models could arguably be in noncompliance with the mandate of providing services in the least restrictive environment. Self-contained, resource room, and pull-out models do not allow opportunities for interactions between students with disabilities and students without disabilities. Those types of interactions are necessary for the social development of both groups. The consultation model relies heavily on the SLP's ability to train and supervise others in how to execute clinical methods. Currently, the ASHA does not require specific clinical clock hours in the area of consultation or supervision services. Thus, it is not known how thoroughly graduate schools train such skills. The quality of the consultation will only be as good as the knowledge base of the SLP in the areas of consultation methods and supervision strategies. The team teaching model is time intensive because success relies heavily on collaborative team planning. Time to conduct collaborative planning is hard to find. The cooperative learning, teaming for reading, and team teaching models may be efficient only in larger school districts, where several students on one caseload are found in one classroom. Use of this approach may not be possible for the SLP who works in a small, rural district or for the SLP who travels among several schools. The prevention model holds its own unique challenge. In this age of accountability, how do educators document effectiveness if the disability never surfaces as a result of effective prevention efforts?

Each model holds its own promises and pitfalls. It is up to the IEP team to determine the appropriate service delivery model based on the needs of the individual student. Those needs may change dramatically from one school year to the next. Budget planning and personnel time allocations must remain flexible and allow for fluid transitions among service delivery models. In this age of dwindling resources, maintaining flexibility presents its own challenge. Nevertheless, SLPs and their school systems have found ways to make innovative programs work, as evidenced by all of the examples provided in this chapter.

2007). The current estimated prevalence for ASD in the United States is 34 per 10,000 (Yeargin-Allsopp et al., 2003). The National Institutes of Health (2001) reported that approximately 1 of every 250 births are affected by ASDs. According to the National Outcomes Measurement System (NOMS) conducted by ASHA (2002b), two thirds of preschoolers with ASD achieve gains in functional communication, spoken language, and social use of language after intervention provided by an SLP.

### **General Recommendations**

A comprehensive study conducted by the NRC (2001) documents that children with ASD who participate in intensive intervention beginning at the age of 3 years have a significantly better outcome than that in children beginning intervention after age 5. Children with ASD require intensive, instructional programming a minimum of 5 hours

per day, 5 days per week. They require instructional opportunities that are organized in a series of brief time intervals and include systematically planned, developmentally appropriate learning activities with a sufficient amount of adult attention. Children with ASD require individualized attention on a daily basis. A student-to-staff ratio of no more than two young children with ASD per adult in the classroom are recommended. Children with ASD should receive programming that allows for: functional, spontaneous communication; social interaction in various settings; facilitation of play skills with peers; generalization of newly learned skills in natural contexts; positive behavioral support; and functional academic skill development.

Table 5–4 provides the supportive evidence for those clinical approaches that typically are used by school-based SLPs. No single approach is endorsed over another.

**Table 5–4.** Evidence of What Works: Social Communication Intervention

Intervention Perspective	Supportive Evidence
<p><b>Conversational group therapy approach</b>—Group members engage in conversations while the SLP provides attending cues, facilitative questions, negotiations, verbal praise for spontaneous production of targets, modeling, mediating, prompting, gate-keeping, and summarizing.</p>	<p>Ewing, 1999 Roth &amp; Paul, 2007</p>
<p><b>Conversational coaching</b>—The SLP stimulates conversational interaction in a structured context by providing a model of short, meaningful utterances as a written script that the client imitates. The topic is selected based on the client’s interests. The client reads the script aloud one sentence at a time using gestures, if necessary, to convey meaning. The client is videotaped, and the tape is replayed to an unfamiliar listener. The listener rates his or her ability to understand what the client said. The three evaluate the video to determine the most and least helpful strategies. The process is repeated multiple times.</p>	<p>Holland, 1995</p>
<p><b>Collaborative model</b>—The SLP establishes partnerships with families. The family defines its level of involvement. The SLP provides the family with information and teaches the family interaction skills, behavioral management skills, and strategies to enhance language development.</p>	<p>National Research Council, 2001</p>

*continues*

Table 5–4. *continued*

Intervention Perspective	Supportive Evidence
<b>Co-model</b> —The SLP and the family play complementary roles in developing goals and executing an intervention plan.	Marcus, Kunce, & Schopler, 2005
<b>Behavioral model</b> —Family members learn and apply specific behavior-shaping strategies.	Marcus, Kunce, & Schopler, 2005
<b>Cognitive approach</b> —Family members learn problem-solving strategies, cognitive restructuring, and how to set realistic expectations.	Marcus, Kunce, & Schopler, 2005
<b>Emotional support</b> —Professionals provide empathetic listening and teach problem-solving strategies for concerns that the family has identified.	Marcus, Kunce, & Schopler, 2005
<b>Advocacy training</b> —Professionals assist families in learning how to advocate for services and system changes. The SLP, intervention team, professionals, and/or family promote self-determination in children with ASDs.	Marcus, Kunce, & Schopler, 2005 Westling & Fox, 2000 Baker, Horner, Suppington & Ard, 2000
<b>Natural language paradigm</b> —An ecological approach in which communication competence is fostered in natural settings.	Koegel, O’Dell, & Koegel, 1987
<b>Incidental teaching</b> —Language skills of labeling and describing are learned in naturally occurring activities during adult-child interactions.	Hart, 1985 McGee, Krantz, & McClannahan, 1985 McGee, Morrier, & Daly, 1999
<b>Time delay, milieu intervention</b> —The SLP, intervention team, educators, professionals, and/or family use ongoing activities as the basis for intervention and incorporates the operant principles of imitation, modeling, and reinforcement into natural settings.	Charlop, Schreibman, & Thibodeau, 1985 Hwang & Hughes, 2000b Kaiser, 1993 Kaiser, Yoder, & Keetz, 1992
<b>Pivotal response training</b> —The SLP, intervention team, educators, professionals, and/or family allow choice over the nature of the interaction and materials used in a natural context and reinforce the attempt to respond for the child with an ASD.	Koegel, 1995 Koegel, Camarata, Koegel, Ben-Tall, & Smith, 1998 Whalon & Schreibman, 2003
<b>Developmental strategies</b> —The SLP, intervention team, educators, professionals, and/or parents teach language comprehension and production based on a model of typical development and sequence.	Aldred, Greer, & Adams, 2004 Hwang & Hughes, 2000b Lewy & Dawson, 1992 Mahoney & Perales, 2005 Rogers & Lewis, 1989 Greenspan & Wieder, 1997 Prizant & Wetherby, 1998
<b>Positive behavior support</b> —The SLP, intervention team, educators, and/or family directly target the relationship between challenging behavior and communication. The scientific practice of applied behavior analysis is incorporated into a person-centered, comprehensive program with a focus on intervention in the natural context to use prevention strategies, foster replacement skills, and respond in a positive manner.	Horner, Albin, Sprague, & Todd, 2000

Table 5–4. *continued*

Intervention Perspective	Supportive Evidence
<p><b>Teach functional equivalents</b>—The SLP, intervention team, and/or family teach the child with an ASD communication functions (e.g., to request objects, request assistance, express frustration, or seek attention) to replace undesirable behaviors.</p>	<p>Carr et al., 2002            Durand &amp; Carr, 1991, 1992            Horner, Day, Sprague, O’Brian, &amp; Heathfield, 1991            Horner, Albin, Sprague, &amp; Todd, 2000            Lalli, Casey, &amp; Kates, 1995</p>
<p><b>Augmentative-assistive technology and methods</b>—The SLP, intervention team, educators, and/or family teach the child with an ASD to use alternative communication modalities to engage in social interactions.</p>	<p>Barrera, Lobatas-Barrera, Sulzer-Azaroff, 1980            Barrera &amp; Sulzer-Azaroff, 1983            Bopp, Brown, &amp; Mirenda, 2004            Brady, 2000            Frea, Arnold, &amp; Vittimberga, 2001            Ganz &amp; Simpson, 2004            Garrison-Harrell, Kamps, &amp; Kravits, 1997            Layton, 1988            Light, Roberts, DiMarco, &amp; Greiner, 1998            Mirenda, 1997a, 1997b , 2003            Peterson, Bonday, Vincent, &amp; Finnegan, 1995            Shane &amp; Simmons, 2001            Wendt, Schlosser, &amp; Lloyd, 2004            Yoder &amp; Layton, 1988</p>
<p><b>Environmental arrangement strategies</b>—The environment is arranged to promote social communication, initiation, and development (e. g., placing desired materials out of reach and creating a problem-solving situation).</p>	<p>Hwang &amp; Hughes, 2000a, 2000b            Matson, Sevin, Fridley, &amp; Love, 1990            Panerai, Ferrante, &amp; Zingale, 2002            Rogers, 1998</p>
<p><b>Picture schedules and visual supports</b>—The SLP, intervention team, educators, and/or family use pictures to foreshadow activities, allow choices, and depict social communication requests.</p>	<p>MacDuff, Kranz, &amp; McClanahan, 1993            Bryan &amp; Gast, 2000            Watanabe &amp; Sturmey, 2003            Reinhartsen, Garfinkle, &amp; Wolery, 2002            Charlop-Christy, Carpenter, Le, LeBlanc, &amp; Kellert, 2002            Ganz &amp; Simpson, 2004            Johnston, Nelson, Evans, &amp; Palazdo, 2003</p>
<p><b>Picture exchange communication system (PECS)</b>—A picture or graphic communication system is used to increase functional and spontaneous requests in clients with ASDs.</p>	<p>Bondy &amp; Frost, 1994            Charlop-Christy, Carpenter, Le, LeBlanc, &amp; Kellert, 2002            Ganz &amp; Simpson, 2004</p>

*continues*

Table 5–4. *continued*

Intervention Perspective	Supportive Evidence
<p><b>Picture exchange communication system (PECS)</b> <i>continued</i></p>	<p>Johnston, Nelson, Evans, &amp; Palazdo, 2003            Kravits, Kammpps, Kemmerer, &amp; Potucek, 2002            Krantz &amp; McClannahan, 1998            Schwartz, Garfinkle, &amp; Bauer, 1998            Ticani, 2004            Yoder &amp; Stone, 2006</p>
<p><b>Social stories</b>—Printed text is supplemented with picture icons or photographs to provide scripts for appropriate behaviors and social skills.</p>	<p>Charlop-Christy &amp; Kelso, 2003            Krantz &amp; McClannahan, 1998            Sarokoff, Taylor, &amp; Poulson, 2001            Gray, 1995            Barry &amp; Burlew, 2004            Ivey, Heflin, &amp; Alberto, 2004            Kuttler, Miles, &amp; Carson, 1990            Kerr &amp; Durkin, 2004            Parsons &amp; Mitchell, 1999            Wellman et al., 2002</p>
<p><b>Play and peer mediation</b>—Children with autism spectrum disorders are included in natural play settings with age-matched peers; the adult teaches specific interaction styles to the age-matched peers and also facilitates pragmatic skills in the child with the disorder.</p>	<p>Haring &amp; Lovinger, 1989            Guralnick, 1976            Sainato, Goldstein, &amp; Strain, 1992            Shearer, Kohler, Buchan, &amp; McCullough, 1996            Strain, Kerr, &amp; Ragland, 1979            Odom &amp; Strain, 1984            Oke &amp; Schreibman, 1990            Pierce &amp; Schreibman, 1994            Strain &amp; Kohler, 1998            Taylor, Levin, &amp; Jasper, 1999            Thiemann &amp; Goldstein, 2004</p>
<p><b>Video modeling</b>—The child with autism spectrum disorder watches a video of a peer or peers engaged in the targeted social skill. The SLP, intervention team, educators, and/or family view and discuss the video multiple times with the child.</p>	<p>Charlop &amp; Milstein, 1989            Charlop-Christy, Le, &amp; Freeman, 2000            Taylor, Levin, &amp; Jasper, 1999</p>
<p><b>Computerized instruction</b>—The SLP, intervention team, educators, and/or family teach the child with autism spectrum disorder keyboarding skills and computer use for the development of sentence structure, vocal and written responses, vocal imitation, social problem solving, vocabulary, communication initiation, and topic-related communication.</p>	<p>Yamamoto &amp; Miya, 1999            Bernard-Opitz, Sriram, &amp; Sapuan, 1999            Bernard-Opitz, Sriram, &amp; Nakhoda-Sapuan, 2001            Bosseler &amp; Massaro, 2003            Moore &amp; Calvert, 2000, 2003            Hetzroni &amp; Tannous, 2004</p>
<p><b>Preview learning context and activity</b>—The SLP, intervention team, educators, and/or family spend approximately one hour foreshadowing the day’s academic lessons with students with ASD.</p>	<p>Koegel, Koegel, Frea, &amp; Green-Hopkins, 2003</p>

ASD = autism spectrum disorder.

or caregivers need a **respite care** plan, and school professionals need to work together. The team approach must be person centered. The team must analyze the communicative intent of the behaviors. How is the current unacceptable behavior meeting the child's needs? What pressures are causing or stimulating the behavior? The team must analyze the child's environment and consider changes in the environment before considering changes in the person. The environment must be modified so that the negative precipitating factors are minimized and opportunities for enrichment and growth are maximized.

The team must increase communications and positive interactions with the student during non-crisis times and foster independence rather than interdependence. Any feedback needs to be within the individual student's sphere of comprehension. Sometimes visual cues are needed to help the student understand the feedback; for example, the SLP may reinforce statements by holding up cardboard disks of different colors. If the student's behavior is acceptable, the SLP holds up a green disk which means on-task, acceptable behaviors. If the student's behavior is irritating another individual, the SLP holds up a yellow disk which means irritating behaviors. Finally, if the student's behavior is not appropriate, the SLP holds up a red disk which means unacceptable behaviors that must stop. Humor, diversions, and physical exercise should be considered as proactive strategies. The behavior plan should be written into the IEP so that all of the involved parties are consistent in their approach, and so that parents or legal guardians can approve the plan.

### **Creating a Culture of Community**

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Perhaps the most effective, yet most difficult proactive strategy is to move beyond the realm of discipline into the realm of establishing a classroom community. Kohn (1996) pointed out that taking time to teach children to care about each other also may have a positive influence on their enthusiasm for learning academic material. Students need to feel safe in order to take intellectual risks. They need to feel comfortable before they can pur-

posefully tackle challenges that make them feel uncomfortable. The fear of being judged or humiliated has a detrimental effect on the learning process. Academic excellence may be achieved only if children have positive feelings about school, the school environment, and each other.

Johnson and Johnson (1995) described approaches to discipline on a continuum and the costs and benefits of using each type of program. At one end of the continuum are programs based on adult-administered external rewards and punishments. These types of programs are designed with the idea that faculty members control and manage student behavior. At the other end of the continuum are discipline programs that focus on teaching students the competencies and skills they need so that they can manage their own behaviors. These types of programs are designed to teach peer mediation skills so that students may self-regulate their behaviors.

Most discipline programs are clustered at the external rewards-punishments end of the continuum. Programs that use external rewards and punishments are costly because students must be continuously observed and authority figures are required to resolve conflicts. They encourage a "don't-get-caught" attitude in the minds of students, rather than development of a sense of personal responsibility. Students are not empowered by external rewards and punishments. Schools that use an external rewards-punishments system may achieve an orderly learning environment, but such systems do not help students learn the conflict resolution skills and attitudes they need to become productive citizens.

Programs at the other end of the continuum teach **self-regulation**. Students learn to monitor a situation, assess interactive behaviors, and take another person's perspective into consideration. Learning self-regulation advances their cognitive and social development. Students are given opportunities to make decisions and reflect on those decisions. When students learn self-regulation, educators are able to focus on instruction, rather than on control. Teaching self-regulation, however, also is very time-consuming and often requires one-on-one discussions with guided questions. Self-regulation does not simply spring from within; rather, it must be taught through example, expla-

nation, model imitation, metacognitive processing, self-reflection, and behavior management procedures such as those offered by Hegde and Davis (1995).

Curwin and Mendler (1999) pointed out that most students are able to follow a social contract that the entire class has created. Some students, however, must have an individual contract in order to comply with social norms. The SLP who uses inclusive practices must be involved with general educators to implement a proactive discipline program. Curwin and Mendler described eight positive strategies for dealing with confrontational students who require individualized behavioral contracts: positive student confrontation; family intervention; comprehensive social contract; cognitive behavior modification; role reversal; videotaping; audiotaping; and using older students as resources. These strategies are described next.

### Positive Student Confrontation

Positive confrontation involves setting aside some time to meet individually with the student and attempting to resolve differences through negotiation. It requires the SLP to be willing to share directly with the student, to take the risk of hearing unpleasant things from that student, and to consider program modifications for the student. The SLP begins by describing the problem, the process, and his or her role. (*Example*: “I’m here to see if I can help you find a way to settle down your behaviors so that I can teach and you can learn.”) Then the SLP and the student share feelings of dislike, resentment, anger, or frustration. (*Example*: “Tell me what makes you so angry. Then I’ll tell you what makes me angry.”) Each party must paraphrase what he or she hears from the other. Next, the SLP and the student share appreciations. (*Example*: “This is what I like about you . . .”) Again, each party must paraphrase what he or she hears from the other. Then the SLP and the student make demands. (*Example*: “Tell me what you want to be different.”) Then the SLP and the student negotiate a solution. (*Example*: “Tell me what you’re willing to do differently.”) Once an agreement is reached, the plan is put in

writing and signed by both parties. A follow-up meeting is scheduled. The student and the SLP both look forward to the follow-up meeting to discuss how well it has worked and how each party feels about it.

### Family Intervention

In family intervention, the SLP meets with the legal guardian, caregiver, parents, or parent and assesses how well equipped each family member is to provide support. If multiple problems are recognized, they agree on which problem to focus on first. Then the student is brought into the meeting, and the problem is described in specific terms. A concrete, measurable goal is established. The goal should be one that can be reached in a short amount of time (e.g., having 3 days of no fighting, completing homework, arriving to class on time). Positive and negative consequences are identified. The plan is put into writing. A monitoring system that the student agrees to is created. The plan is reviewed periodically. The family is given feedback (e.g., using a daily student rating card).

### Comprehensive Social Contract

In this approach, all parties claim ownership for the student’s problem (SLP, student, parent, administration, school personnel). Specific tasks are outlined for each person to carry out to ensure a positive change in the student’s behavior. Realistic goals are set. An ongoing communication system is established. All parties agree to work together.

### Cognitive Behavior Modification

Cognitive behavior modification is a metacognitive approach that requires the student to engage in self-reflection and self-awareness in a problem-solving fashion. Camp, Blom, Herbert, and Van Doornick (1977) created the “Think Aloud” method, which requires the student to answer four questions: (1) What is my problem? (2) What is my plan to solve the problem? (3) Am I using my plan? (4) How did I do?

aspects of a culture (e.g., greeting style, distance between speakers, eye contact, touch). Finally, the SLP should develop a culture-specific sense of the importance of an individual in relation to the group and how this role may vary among different cultures.

### Interview and Case History

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School-based SLPs must consider cultural diversity at every step of the individualized education program (IEP) process and with every aspect of assessment, intervention, consultation, and collaboration. The SLP must be aware of culture differences when seeking case history information. Harris (1993) cautioned that establishing rapport can be heavily influenced by the type of topics addressed, questions asked, and the manner in which each question is asked. Questions typically asked during a case history (regarding birth history, place of residence, the nature of the client's communication difficulties, and so on) may be considered by some clients as being too personal, intrusive, inappropriate, or irrelevant. In some Native American communities, for example, the mere mention or discussion of an individual's disability can be viewed as potentially putting that person at risk for greater difficulties. For some clients, questions as simple as "Where do you live?" can be viewed with suspicion. Clients who have a high level of cultural mistrust, as defined by Terrell and Terrell (1996), may misinterpret this type of question as an indirect attempt to obtain private information, such as the client's socioeconomic or immigration status (i.e., illegal versus legal). Either of these can have a negative impact on the amount of information that clients are willing to disclose.

Battle (1998) recommended asking someone who knows the client's cultural community to review case history questions before the interview to determine their cultural appropriateness. The cultural mentor may be an elderly person, an extended family member, a religious leader, another educator, a physician, a social worker, or a local political leader. By enlisting the assistance

of a cultural mentor, the SLP may gain important knowledge about the family's views on spirituality, holidays, history, traditions, education, art, music, family structure, the role of women, sleeping patterns, food preferences, feeding patterns, standards for hygiene, toilet training, affective attitudes, behavioral expectations, work ethic, health care, time orientation, eye contact, **paralanguage silence**, personal space and proximity, facial expressions, head nodding, voice loudness, voice inflection and stress, social rituals, use of names, use of humor and sarcasm, patterns within conversational turn taking, phonological and linguistic differences, attitudes toward pets and animals, and beliefs related to disabilities. These are just a few of the cultural, social interaction, and communication features that may influence how successful the SLP will be in obtaining case history information.

The SLP and other team members must be respectful of the family's culture when collaborating during the IEP process. Something as simple as providing tea, rather than coffee, during a conference meeting may make a big difference in how comfortable the family members may feel during the meeting. Interaction style also is an important consideration. Table 7-1 depicts some differences between African-American cultures and other cultures with respect to interaction styles.

### Assessment Tools

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The SLP must consider cultural diversity when selecting standardized assessment tools (ASHA, 2004; Crowley, 2003; Taylor, 1986; Wolfram, 1976). Although this sounds relatively simple, determining the norms and expectations of a student's speech community can in fact be quite challenging. For instance, a student may come from a speech community where Hmong is spoken. In school, the student is exposed primarily to Standard American English. In the home community, the student is exposed to several dialects of Hmong and several dialects of English (including Spanish-Influenced English and African American English). Among his friends in the community, he usually "code switches" between Hmong, Spanish-Influenced

**Table 7–1.** Interaction Styles of African Americans Contrasted with Other Cultural Groups

Interaction Feature	African-American Culture	Opposing View
Touching	Another person touching one's hair is offensive	Another person touching one's hair is a sign of affection
Eye contact	Indirect eye contact during speaking is a sign of attentiveness and respect	Direct eye contact during listening and indirect eye contact during speaking are signs of attention and respect
Public behavior	Public behavior may be emotionally intense, dynamic, and demonstrative	Public behavior is modest and emotionally restrained; emotional displays are seen as irresponsible or in bad taste
Conflict	A clear distinction exists between argument and fight; verbal sparring is not necessarily a precursor to violence	Heated arguments suggest that violence is imminent
Sharing personal information	Asking personal questions of someone a person has met for the first time is seen as improper and intrusive	Inquiring about jobs, family, and so forth of someone a person has met for the first time is seen as friendly
Reaction to direct questions	The use of direct questions is sometimes seen as harassment	The use of direct questions for personal information is permissible
Turn taking in conversation	Interruption during conversation usually is tolerated; access to speaking is granted to the person who is most assertive	Rules of turn taking in conversation dictate that one person speaks at a time until all of that person's points are made
Conversational additions	Conversations are regarded as private between the recognized participants	Adding a point of information or insight to a conversation in which a person is not engaged is seen as being helpful
Interpretation of silence	Silence denotes refutation of accusation	Silence denotes acceptance of an accusation

Sources: Freiberg, 1997; Taylor, 1986.

English, African American English, and Standard American English. What, then, is that student's speech community, and what standard should be applied? Zentella (1997) documented that in New York City, SLPs frequently are asked to evaluate students from bilingual or multidialectal homes and communities in which several dialects of Spanish and English are spoken. The children from these communities receive a variety of linguistic inputs, such as Standard Spanish, Standard Puerto Rican Spanish, Standard Dominican Spanish, Vernacular Spanish, Standard English, Puerto Rican English,

Hispanized English, and African American English. Speakers from these communities often switch between dialects of one language or between dialects of the two different languages, depending on the person to whom they are speaking, where they are speaking, what they are speaking about, and why they are speaking.

School-based SLPs have been frustrated by the lack of appropriate assessment tools available for use with today's diverse school-age populations. As discussed by Crowley and Valenti (2004), biases in assessment tools include more than the form of

the language. Biases also include the manner in which language is used. Communication is determined by cultural factors. Most testing procedures do not take the cultural aspects of communication into consideration. Heath (1982) pointed out that the cultural norm of labeling objects and pictures in books by parents of mainstream American middle class is not part of parenting styles among other cultures. Yet standardized tests often require the child to sit, look at pictures, and label objects during assessment of vocabulary development. As documented by Pena and Quinn (1997), labeling objects and pictures in books is not part of certain Puerto Rican and African-American cultures.

School-based SLPs must be concerned about discrimination at all age levels, especially at the preschool level, when adult-child interactions are particularly tender. Schraeder, Quinn, Stockman, and Miller (1999) pointed out three major concerns. First, few tests include persons from low-income families in the normative populations, regardless of race. Second, the interaction style demanded by many standardized tests does not match the interaction style of preschool children. Crago (1992) documented that preschool children typically engage in parallel, rather than interactive, play. Adler (1993) and Schieffelin (1994) also documented that children from different cultures relate differently during adult-child interactions. Third, the definition of what constitutes a communication delay or disorder has broadened over the past two decades. Standardized tests often focus exclusively on phonology, syntax, comprehension, and auditory processing skills. As documented by Crais (1994, 1995), McCauley and Swisher (1984), McFadden (1996), and Wetherby and Prizant (1992), other aspects of communication, such as the interaction style of the conversational partner, discourse parameters, materials used, the setting, the task, and the demands on information processing, also are important aspects to assess.

Informal assessment tools also have proved to be problematic. Crowley and Valenti (2004) and Heath (1982) documented that cultural biases are present in alternative assessment procedures. For example, the quality and quantity of a language sample that is collected may be significantly affected by social and cultural factors. For example, a child

of any culture may be reticent in speaking with an unfamiliar adult about something uninteresting in an unfamiliar setting; however, the child's linguistic performance may be judged substandard by an educator with unconscious bias toward the child's cultural group. Moreover, if the elicitation task is culturally unfamiliar to the student, the language sample may not yield true production abilities, as in a language sample that is collected through a story-retell task. This elicitation task can be biased if the child has not had experience telling or hearing stories because it is not part of his or her culture to do so.

When a language sample is being collected for analysis, Adler (1993) and Hegde and Davis (1995) recommended acquiring more than one sample in different settings and with different people. In this way the SLP is able to analyze not only the various parameters of language, articulation, voice, fluency, and pragmatics but also which antecedents enhance linguistic performance, diminish performance, or appear to have no impact. Collecting language samples while the student is interacting with various family members also may give the SLP insight into which family member seems the most appropriate candidate for working with the student in a home carryover program.

When conducting a classroom observation, the SLP must be aware of the differences between the expectations of the American classroom and the expectations of parents from various cultural and ethnic groups. Table 7-2 illustrates the contrast between American and Asian cultures in terms of expectations of classroom behaviors.

The SLP must be aware of the influences of culture on the student's learning style. Freiberg (1997) cautioned that communication characteristics and the learning styles that are typical in Native American Indian cultures may be misinterpreted as characteristics that warrant a referral for special education. Such characteristics include the following:

- Reliance on nonverbal communication. A nod, smile, or shrug, for example, may be used for this purpose.
- Saying only what is necessary. A student may answer simply "yes" or "no," for

**Table 7-2.** Comparison of American and Asian Cultures for Expectations of Classroom Behaviors

<b>Behavioral Feature</b>	<b>Expectations of American Classroom Teacher</b>	<b>Expectations of Parents from an Asian Culture</b>
Student participation	Students need to actively participate in classroom activities and discussions	Students are to be quiet and obedient
Student initiative	Students need to be creative	Students should be told what to do and what not to do
Mode of learning	Students learn through inquiries and debate	Students learn through memorization and observation
Student-teacher interaction	Asian students do well on their own	Teachers need to teach; students need to study
Level of thinking	Critical thinking and analytical thinking are important	Factual information is important
Problem solving	Creativity and fantasy are encouraged	Students should be taught the steps to solve problems
Question asking	Students need to ask questions	Teachers are not to be challenged

Sources: Cheng, 1991; Freiberg, 1997.

example, or fail to elaborate when to do so is expected.

- Speaking in a soft, low-pitched voice. In these cultures, loud, projected speech is to be avoided in conversation because it indicates aggression or anger.
- Displaying a deep sense of humor and an ability to see humor in life. Educators may perceive such behavior as rude or as a manifestation of emotional imbalance.
- Long pauses in conversation. A student who is deliberate in giving a response, rather than providing instant answers, may be perceived by educators as not knowing the answer or as having an expressive language or auditory processing problem.

A majority of middle class white students begin school as auditory learners. They have been bombarded with verbal information since early childhood. Their parents talk to them a great deal. They are encouraged to talk, to learn new words, and to express their ideas. Their parents have

taught them many things through verbal explanations. By contrast, many Native American Indian students are visual learners. They have learned to do things by observing. When their parents instruct them in new skills, they do so mostly by showing them how to do something. The students learn to do the things their parents do by imitating them. They have been taught that children should not be talking continuously. These children have done most of their learning through direct experience and participation in real-world activities.

The issue becomes even more complex when the SLP considers factors related to code switching and code mixing. Major differences exist between discourse rules in different cultures. Cheng (1999b) reported results from a study conducted by Bishop (1988), who observed Vietnamese children living in America. The children were using English discourse rules along with those of their home culture, simultaneously engaging two different codes—one linguistic and one pragmatic. This study showed the importance of knowing not only the linguistic rules but also the cultural rules of a new language.

When assessing students who are English language learners, the SLP must be aware of deeper levels of language proficiency, as well as the surface levels of language proficiency. Cummins (1984) describes two levels of English proficiency:

1. Basic **interpersonal communication skill (BICS)**—required for social communication. BICS is the type of communication students acquire first because it is rich in the context of the situation and in social interaction. Cummins argues that students usually are able to acquire BICS within 2 years.
2. Cognitive academic language proficiency (CALP)—required for academic learning that is new and unfamiliar. Less information is derived from the immediate context. CALP requires students to learn exclusively from the language used to convey the message. They are not able to rely on situational cues. Cummins argues that CALP proficiency may take 5 to 7 years or longer to achieve.

The classroom teacher may wrongly refer an English language learner (ELL) who has acquired BICS for special education services. For example, the teacher may see an adolescent ELL joking in the halls with other students, obtaining a driver's license, and acquiring a part-time job. On the basis of such observations, the teacher believes that for all practical purposes, this student has well-developed functional English language skills. When that adolescent with BICS proficiency

enters the classroom, however, he or she may struggle with academic performance if the student has not yet achieved CALP. Students need to acquire proficiencies along a continuum of BICS to CALP, and the SLP must know how to assess and evaluate those students' language proficiency with respect to academic performance, as well as social skills performance. Figure 7-1 shows four quadrants that illustrate the effect of context on cognitive demand.

Cummins also makes the point that students who have acquired BICS may be able to function proficiently at the lower levels of Bloom's (1956) taxonomy (i.e., knowledge, comprehension, and application), but not at the higher levels (i.e., analysis, synthesis, and evaluation), because of the advanced language complexity required to respond to academic tasks that address the higher levels of the taxonomy.

### New Approaches to Assessment

It is not realistic for the school-based SLP to become proficient in every language that is spoken within the school-age population. A solution that shows promise is to assess the student's language-learning ability, rather than language proficiency. Two new approaches of measuring language-learning ability that are currently being researched are **fast-mapping** (also known as quick incidental learning) and **dynamic assessment**. Hwa-Froelich,

<b>Context rich</b>	<b>Context reduced</b>
Cognitively demanding	Cognitively demanding
<b>Context rich</b>	<b>Context reduced</b>
Cognitively undemanding	Cognitively undemanding

**Figure 7-1.** Effect of context on cognitive academic language proficiency.

Westby, and Schommer-Aikins (2000) described fast-mapping as when children participate in an activity in which they hear novel or unfamiliar words. The caregiver or educator does not attempt to teach the words but provides opportunities for the child to hear the words, morphemes, or concepts. Children are then presented with tasks requiring them to display their ability to comprehend and produce the novel or unfamiliar words. Dollaghan (1985), Rice, Buhr, and Nemeth (1990), and Oetting, Rice, and Swank (1995) demonstrated that children with language impairments exhibit a slower rate of language learnability than that observed in children who demonstrate typically developing language acquisition. Thus, fast-mapping shows promise as a way to assess a student's language-learning ability ("language learnability") without having to consider the child's native language. Hwa-Froelich (2000) and colleagues (Hwa-Froelich et al., 2000) indicated that dynamic assessment differs from fast-mapping in that the examiner actively teaches and carefully "mediates" the child's learning. A test-teach-test sequence is employed.

Another new approach being researched is **authentic assessment**. Udvari and Thousand (1995) defined authentic assessment as occurring when students are expected to perform, produce, or otherwise demonstrate skills that represent realistic learning demands. The contexts of the assessments are real-life settings in and out of the classroom without contrived and standardized conditions. Rosin and Gill (1997) and Schraeder and associates (1999) determined that authentic assessment differs from language sample analysis because it adds contextual, performance dimensions, and instructional linkages to the analysis of the child's communication competence.

The difference between BICS and CALP must be taken into consideration when an authentic assessment approach is used. Westby (2000) created the *Playscale* that reflected five possible play-language relationships. Three statements on the scale described typical cognitive and language development characteristics, and two statements described characteristics of disordered communication. A similar play-language scale that reflects the continuum of BICS to CALP could be developed as a useful authentic assessment tool.

Other alternatives to standardized assessment tools include criterion-referenced tools, client specific tools, dynamic assessment, and portfolio assessment. Criterion-referenced and dynamic assessments and client-specific and portfolio assessments are advantageous because the student need not be compared to students in a normative sample or population. These alternatives establish a set of characteristics, or rubrics, that the student is expected to achieve. In the case of dynamic assessment and client-specific assessment, the student's performance compared with his or her own baseline performance to determine the rate of progress. In the case of criterion-referenced and portfolio systems, the student is judged on how well he or she has met the defined criteria. Section VI of the *ASHA Directory of Speech-Language Pathology Assessment Instruments* offers a description of evaluation tools designed for use with culturally and linguistically diverse populations (ASHA, 2007). The ASHA Directory is available at [www.asha.org/policy](http://www.asha.org/policy)

### Cultural Considerations Related to Intervention

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The need for cultural competency does not end with collaboration, assessment, and evaluation. The SLP also must be aware of cultural differences when engaging in intervention. Burnette (1999) recommended *teaching behaviors* that may build a stronger teaching-learning relationship with culturally diverse students:

- Appreciate and accommodate the similarities and differences among the students' cultures. Effective teachers of culturally diverse students enthusiastically acknowledge both individual and cultural differences and identify these differences in a positive manner. This positive identification creates a basis for developing effective communication and instructional strategies. Social skills such as respect and cross-cultural understanding can be modeled, taught, prompted, and

## Introduction

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The modern-day speech-language pathologist (SLP) must become a member of the collaborative educational team that creates the school culture. Gone are the days when the school-based SLP could slip in and out of several schools providing itinerant services in isolated settings. As stated by Judy Rudebusch, an SLP active in professional research and policy making, "The SLP of yesterday may have said, 'I work at a school and I have a caseload of 40 children,' but the modern-day SLP must say, 'I work at a school and I am a part of the school community that supports a positive learning atmosphere for all children, not just the children on my caseload'" (J. Rudebusch, statement during a discussion at an ASHA ad hoc committee meeting, July 2002).

The Child Development Project (CDP, 1994) advocated that schools must foster caring relationships, not only in the classroom but also on the playground and throughout the school building. Creating a *sense of community* is the first step toward positive relationships. The SLP who does not have time in his or her workload devoted to creating a sense of community might as well relinquish all other efforts related to conferencing and counseling. Without trust and caring relationships, effective counseling and conferencing will not happen. Trust must be established between the SLP and other educators; between the SLP and administrators; between the SLP and parents, legal guardians, or caregivers; and between the SLP and students.

The CDP (1994) documented that schoolwide activities may either reinforce or undermine initiatives to develop trust. The best way to facilitate trust is to create activities that are inclusive, support children's learning, foster an appreciation of differences, and provide children with the opportunity to help others. The five essential community-building ingredients identified by the CDP can be summarized as follows.

1. *Inclusion and participation.* All parents, students, and school staff members should be

invited to participate freely in schoolwide activities, particularly those designed for families, whether traditional or nontraditional, to enjoy together. The invitations must be warm, welcoming, and nonthreatening. The activities must be designed with attention to special language, cultural, economic, and child care needs of the participating families.

2. *Cooperative environment.* Students and families should be able to enjoy cooperative, non-competitive activities that promote the value of learning together and helping others. Everyone should feel good about succeeding. The activities should not create "losers."
3. *Emphasis on responsibility and helpfulness.* Students should be given opportunities to experience the value of helping others. Everyone should take responsibility within and outside of the school community.
4. *Appreciation of differences.* Parents, students, and school staff members should be made to feel that their social and cultural backgrounds are valued and respected within the school community. Everyone should share his or her cultural heritage and learn from others.
5. *Reflection.* Everyone should be encouraged to reflect on what has been learned from the group experience and from working together.

When a family identifies with the school, feels included, feels appreciated, and has participated in a cooperative environment that has fostered a sense of responsibility and helpfulness, the doors of communication will be open when the need for conferencing or counseling arises. When a family does not identify with the school, has not felt included, has felt cultural alienation, and has been made to feel incompetent in some way, the doors of communication may quickly slam shut.

## Creating a Positive First Contact

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It is essential that the first contact between the SLP and parent, legal guardian, or caregiver be a positive one. In the past, many schools held open

house nights as a way for professionals and parents to come together in a nonthreatening, positive first encounter. Some schools have transformed the traditional open house night from the “show and tell-walk through-eat cookies” scenario into a more interactive, “fun” activity. When children can see that their parents are interested in what they are learning and how they are learning it, they become more eager students and more willing to participate (CDP, 1994). Some innovative, collaborative community-building activities include holding a family film night, family read-aloud fest, science night, math night, family sing-out, or dance night; creating a schoolwide mural, community garden, or family heritage museum; and conducting a fundraiser for a worthy cause. All of these alternatives are not competitive. An illuminating example is the contrast between a traditional science fair and a noncompetitive family fun night that focuses on science learning. The noncompetitive family fun night provides all participants with a collaborative experience that creates a sense of belonging and caring. The differences between a traditional science fair and a science family fun night are shown in Table 8-1.

School-based SLPs should know about these different approaches to collaborative team build-

ing. They are among the professionals who most frequently engage in conferencing and counseling with a student or family. Thus, SLPs have a stake in building a trust relationship through schoolwide activities that develop a community of caring.

### Tips and Techniques for Parent-Teacher Conferences and Individual Education Program Meetings

IDEA '04 mandated that progress related to a student's individualized education program (IEP) must be reported at least as often as general education progress reports are given. For example, if report cards are given on a quarterly basis, then IEP progress must be reported on a quarterly basis. If report cards are given on a trimester schedule, then IEP progress must be reported each trimester. IDEA '04 also placed more emphasis on providing services in a least restrictive environment. As a result, SLPs are finding a greater need to collaborate with other educators during parent-teacher conferences.

Although IDEA '04 required that IEP progress be reported as frequently as general education reports progress, each local school district determines

**Table 8-1.** Comparison of Traditional Science Fair and Noncompetitive Family Science Night

Characteristic	Traditional Science Fair	Science Family Fun Night
Purposes	Individual student projects are displayed; students and families view the projects; awards or ribbons are given to the outstanding projects	Learning stations are created; students and families visit each station and complete an activity together; everyone celebrates one another's successes
Goals	Competitive; goal is to win; some people win, others lose	Collaborative; goal is to participate; everyone wins, no one loses
Student participation	Students work individually	Students work with families and other students
Parent and educator participation	Parents observe; educators judge	Parents participate; educators participate
Inclusion/exclusion factor	Excludes students and families who are unwilling to compete	Includes everyone

Source: Child Development Project, (1994).

## Overview

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As described in Chapter One, school-based speech-language services grew out of a medical model that advocated for students to be “cured” of their delays, disorders, and differences by receiving “speech correction” lessons from a specially trained educator. The **deficit-driven** attitudes of the medical model shaped school-based services until the “Quiet Revolution” began to unfold in 1975. Thirty-odd years later, some school districts continue to operate from that somewhat archaic deficit-driven model. Perrone (1991) pointed out the pitfalls of typical assessment techniques, which provide an artificial, decontextualized view of the learner. Perrone’s concerns have been echoed by the American Speech-Language-Hearing Association (ASHA, 2000): “Standard assessment protocols have not necessarily reflected the changes sought in the educational setting, but rather have tended to measure only the change in the specified deficit area” (p. 5).

The mandates for providing a free and appropriate public education in the least restrictive environment have chipped away at the deficit-driven attitudes as recently as the reauthorization of the Individuals with Disabilities Education Improvement Act (IDEA) of 2004. Today’s school-based speech-language pathologists (SLPs) must collaborate with other educators and design **educationally relevant** individualized education programs (IEPs) that are curriculum-based and more responsive to educational contexts.

The logical link between more educationally relevant IEPs and more educationally relevant assessment tools is becoming clearer. As stated by the ASHA (2000), “It will no longer be appropriate to provide, as some IEPs have done in the past, test scores as sole examples of performance levels” (p. 9).

School-based SLPs are exploring the use of **authentic assessment** tools as they meet the challenge of assessing a student’s strengths, needs, interests, and learning styles in educational contexts. An authentic assessment approach to diagnostic processes has a solid research base behind it (Campbell, 2000; Choate & Evans, 1992; Diez

& Moon, 1992; Lund & Duchan, 1993; Meyer, 1992; Schraeder, Quinn, Stockman & Miller, 1999; Thompson, 2001; Udvari-Solner & Thousand, 1995). The Oral Language Curriculum Standards Inventory (OL-CSI), presented as Appendix 9-1 at the end of this chapter, is an authentic assessment approach, incorporating a clearly stated **curriculum standard** for each grade level, that focuses on the student’s oral language skills in the educational environment. The performance indicators have been synthesized from model academic oral language content standards published by educational agencies across the United States (Virginia Department of Education, 2005; Palo Alto Unified School District, 2005; Ohio Statewide Language Task Force, 1990; Tennessee Department of Education, 2005; Wisconsin Department of Public Instruction, 2005; Wisconsin Model Early Learning Standards, 2005a, 2005b).

The SLP is encouraged to use at least three different sources of information when completing the OL-CSI. Some examples are a classroom observation, a parent interview, and a peer-to-peer interaction in an unstructured setting such as the school playground. If the student is mature enough to do a self-assessment, this also may be a source of information. As documented by Goodrich (1996) and Goodrich Andrade (2000), involving the student, if developmentally capable, in a self-reflective process may have the effect of ultimately increasing the student’s learning on IEP goals.

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