North Dakota
Department of Public Instruction

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Speech-Language Pathology
Public School Guidelines:

Section III:
Special Topics for the Public School
Speech-Language Pathologist

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Introduction

The following section, Special Topics, provides the school-based SLP with current information on a variety of pertinent subjects related to provision of services in a school setting. School-based practice is based on evolving educational trends and reforms. The dynamic nature of education impacts the role of the SLP in the school. Therefore, the guidelines will be reviewed and considered for revision on a regular basis. Revisions will be based on new research, educational trends, legal mandates, and best practices related to the role of the SLP in the schools.

Workload Considerations for the Speech-Language Pathologist

Caseload Considerations

SLPs and administrators are encouraged to consider "workload" versus "caseload" when determining the number of students to be served by SLPs and other service providers. "Workload refers to all activities required and performed by school-based SLPs." (ASHA, 2002, p.204) The difference between workload and caseload are thoroughly explained in the ASHA position statement, "A Workload Analysis Approach for Establishing Speech-Language Caseload Standards in Schools". Examples and worksheets for implementing the workload analysis approach are available at http://www.asha.org/slp/schools/examples.htm.

The *Workload Activity Clusters* (available at www.asha.org/uploadedFiles/slp/schools/p35.pdf) illustrates a number of important outside influences and factors that affect the workload of school SLPs. These factors include the following:

- **Caseload**: The number of children and adolescents the SLP must serve.
- **IDEA mandates**: Provisions in federal law, such as the requirements of free, appropriate public education (FAPE) and least restrictive environment (LRE) strongly and directly influence both the number of students SLPs see and the contexts in which they are served.
- **Student factors**: The expanding range and severity of disabilities of students served under IDEA influences the number of students on the SLP caseload, and the range and time of professional activities necessary to meet their needs.
- **State/local regulations**: Caseloads and workloads are directly affected by other state and local education regulations, such as rules for eligibility and dismissal criteria for students identified as speech-language disabled.
- **School policies and expectations**: Every school and school district has additional expectations and requirements that are a major part of school SLP's workload. Examples include contract preparation periods, travel between assignments, paperwork for compliance with special education regulations and third party billing, and student and program data collection.
- **Professional influences**: Major professional factors include an increase in school SLP roles and responsibilities, and an increase in the school SLP scope of practice (for example, literacy and language-learning disabilities).
- **State certification requirements**: State and local education agencies' requirements for staff development and continuing education influence SLPs' workloads.
- **State and local budgets**: School districts' operating budgets significantly affect allocation of resources, especially approval of additional SLPs to reduce caseloads and improve services to students.
- **Unfunded mandates**: Requirements to locate, identify, and serve all children and adolescents with disabilities with no provision for waiting lists place the weight of timely action on SLPs without a corresponding mechanism to fund the resources necessary to respond. This results in the creation of required work without funding for personnel to complete the work.

Brainstorm list of workload activities of school SLPs.

- Analyze and engineer environments to increase opportunities for communication
- Analyze demands of the curriculum and effects on students
- Attend staff/faculty meetings
- Attend student planning teams to solve specific problems
- Attend teacher/service provider meetings (planning, progress monitoring, modifications to program)
- Carry out assigned school duties (e.g., hall, lunch, bus, extracurricular)
- Collect and report student performance data
- Complete compliance paperwork
- Communicate and coordinate with outside agencies
- Complete daily logs of student services
- Complete parent contact logs
- Connect standards for the learner to the IEP
- Consult with teachers to match student learning style and teaching style
- Contribute to the development of IEPs, IFSPs
- Coordinate with private, nonpublic school teachers and staff
- Counsel students
- Co-Teaching
- Design and engage in pre-referral intervention activities
- Design service plans
- Design and implement transition evaluations and transition goals
- Design/recommend adaptations to curriculum and delivery of instruction
- Design/recommend modifications to the curriculum to benefit students with special needs
- Design and program high, medium and low tech augmentative communication systems
- Document services to students and other activities
- Document third party billing activities
- Engage in special preparation to provide services to students (e.g., low incidence populations, research basis for intervention, best practices)
- Engage in dynamic assessment of students
- Evaluate students for eligibility for special education
- Identify students with speech and language impairment
- Implement IEPs and IFSPs
- Interview teachers
- Make referrals to other professionals
- Monitor implementation of IEP modifications
- Participate in parent/teacher conferences
- Participate in activities designed to help prevent academic and literacy problems
- Participate in professional association activities
- Participate in professional development
- Participate on school improvement teams
- Participate on school or district committees
- Participate in Response to Intervention teams
- Plan and prepare lessons
- Plan for student transitions
- Provide staff development to school staff, parents, and others
- Program and maintain assistive technology/augmentative communication systems (AT/AC) and equipment
- Provide direct intervention to students using a continuum of service delivery options
- Observe students in classrooms
- Re-evaluate students
- Screen students for suspected problems with communication, learning and literacy
- Serve multiple schools and sites
- Supervise paraprofessionals, teacher aides, interns, CFs
- Train teachers and staff for AT/AC system use
- Travel between buildings
- Write funding reports for assistive technology and augmentative communication
- Write periodic student progress reports
- Write student evaluation reports

Additional Caseload/Workload Considerations

SLPs and administrators should consider research data related to caseload size and student outcomes. A review of research, summarized in A Workload Analysis Approach for Establishing Speech-Language Caseload Standards in the Schools: Implementation Guide (ASHA, 2003, p.10), outlines four key components to consider when determining caseload size.
- Services provided to students in large groups appear to minimize opportunities for individualization of interventions.
- When instructed in smaller instructional groups (groups of 3 or fewer), students with a wide range of disabilities are more engaged and have better outcomes.
- Among desired student outcomes, communication skills, in particularly, appear to be positively influenced by small treatment group size, and negatively influenced by larger treatment group size.
- Students on large caseloads and students served in large groups appear to take longer to make progress on communication skills.

"Setting caseloads by analyzing the workload activities will allow SLPs to engage in the broad range of professional activities necessary to implement appropriate and effective services, and tailor interventions to meet individual student needs" (ASHA, 2003, p.17) Administrators and SLPs, should consider the full spectrum of workload when planning for personnel to appropriately meet the needs of students. These considerations demand attention to recruitment and retention issues, supply and demand of qualified staff, and financial resources.

Speech-language pathologists in schools are encouraged to be actively involved in seeking strategies to manage their caseload (Power-deFur, 2001b). Strategies include:
- prevention activities at the school site,
- collaboration with teachers and administrators,
- strategic scheduling and groups,
- participation in problem solving,
- effective utilization of paraprofessionals,
- regular meetings to review caseload size and severity to make adjustments as needed, and

review of student data to determine if children have met their goals and should be referred to the IEP team to determine if they are no longer eligible (Power-deFur, 2001a; American Speech-Language-Hearing Association, 2002).

Weighted Caseload Distribution

Students' age and severity of disabilities should be considered when caseload assignments are made. For example, a student who is enrolled in speech-language services for an articulation error may require less consultation, service time, paperwork, or preparation than a student who has an augmentative device. To count these two students equally on a caseload does not reflect the amount of time involved addressing each student's needs. Conversely, the student who has a severe intelligibility problem may require intensive therapy as opposed to a student with significant disabilities who is a proficient augmentative communication user, requiring only consultation to monitor the equipment. Consideration of student needs is important to caseload distribution and management.

Response to Intervention (RTI)

Speech-language pathologists, as part of an intervention team, may be involved in an RTI model with students who have been identified through the screening process as a student with a mild speech or language impairment. "SLPs working in districts that choose to implement RTI procedures are uniquely qualified to contribute in a variety of ways to assessment and intervention at many levels, from system-wide *program design* and *collaboration* to work with *individual students.* SLPs offer expertise in the language basis of literacy and learning, experience with collaborative approaches to instruction/intervention, and an understanding of the use of student outcomes data when making instructional decisions." *(New Roles in Response to Intervention: Creating Success for Schools and Children*, A collaborative project. November 2006., p.4* http://www.asha.org/uploadedFiles/slp/schools/prof-consult/rtiroledefinitions.pdf)

According to the NDDPI guidance document, "Response to Intervention in a Unified North Dakota Educational System http://www.dpi.state.nd.us/speced1/personnel/RTI.pdf, " Response to Intervention (RTI) is the practice of providing high-quality instruction and interventions matched to student need, monitoring progress frequently to make decisions about changes in instruction or goals, and applying student response data to important educational decisions. RTI can be applied to decisions in general, remedial and special education, creating a well-integrated system of instruction/intervention guided by student outcome data. Optimal learning outcomes occur when students' skills and abilities closely match the curriculum and instruction within the classroom. When a mismatch occurs, student outcomes and learning suffer. Quality classroom instruction usually provides a good match for most students. For other students, success is not easy. The hypothesis is that, with RTI, these struggling students can be identified early and provided appropriate instruction, thus increasing the likelihood that they can be successful.

Three foundational beliefs regarding RTI are identified as follows:
1. All children can learn and we can effectively teach (reach) all children.
2. Everyone involved within a school has the responsibility and need for continuous, job-embedded learning in order to improve student outcomes.
3. Instruction is based on research; and where there is no strong research base, it is acknowledged.

RTI is comprised of 5 major characteristics:
1. **Data-Based Decision-Making** - Important educational decisions regarding supplemental and intensive interventions are based on data representing learning rate and level. Data are critical to making decisions about individual student response to instruction across multiple tiers of interventions, including eligibility for supplemental or intensive services, as well as exit from supplemental or intensive services.
2. **Universal Screening** - Screening is a type of low-cost and easily administered assessment, testing age and grade-level critical skills or behaviors. It identifies high and low performing students who are at-risk of not meeting predetermined benchmarks.
3. **Tiered Service Delivery** - An RTI approach incorporates a multi-tiered approach of educational service delivery. Each tier represents increasingly intense services that are associated with increasing levels of learner needs. The various tier interventions are designed to provide a set of curricular/instructional processes aimed at improving student

response to instruction and student outcomes. A tiered approach consists of three broad tiers although some models may include more. The first tier is considered universal and is comprised of the core curriculum and includes all students. The second tier is referred to as supplemental. When a student is not making expected progress at the universal level, the student might receive supplemental instruction, in addition to the universal instruction. Intervention at this level is generally provided in small groups and can be a standard intervention for any student or can be individualized for a few students. The third tier is often referred to as the intensive level. Students who do not make expected progress with supplemental instruction can move into this level where they receive individualized and more intensive intervention. Such interventions are tailored to the individual needs of the student and might involve modification of the curriculum or additional time with delivery of the intervention in very small or one-to-one settings.

4. **Progress Monitoring** - Progress monitoring is the scientifically and/or evidence-based practice of assessing students' academic and behavioral performance on a regular basis. Progress monitoring serves two purposes:
   a. To determine whether students are making appropriate progress from the core instructional program and,
   b. To build more effective programs for the students who are not making appropriate progress.

5. **Fidelity of Implementation** - Fidelity of implementation is the delivery of instruction in the way in which it was designed to be delivered. Fidelity must also address the integrity with which screening and progress-monitoring procedures are completed and the way an explicit decision making model is followed. In an RTI model, fidelity is important at both the school level (e.g., implementation of the process) and teacher level (e.g., implementation of scientifically based core curriculum and progress monitoring).

RTI and the Speech-Language Pathologist

The following excerpts were taken from "Responsiveness to Intervention: New Roles for Speech-Language Pathologists" by Barbara J. Ehren, EdD, CCC-SLP, Judy Montgomery, PhD, CCC-SLP, Judy Rudebusch, EdD, CCC-SLP, and Kathleen Whitmire, PhD, CCC-SLP, American Speech-Language-Hearing Association

"…Speech-language pathologists (SLPs) can play a number of important roles in using RTI to identify children with disabilities and provide needed instruction to struggling students in both general education and special education settings. But these roles will require some fundamental changes in the way SLPs engage in assessment and intervention activities."

"Regarding intervention and instructional support, SLPs must engage in new and expanded roles that incorporate prevention and identification of at-risk students as well as more traditional roles of intervention. Their contribution to the school community can be viewed as expertise that is used through both direct and indirect services to support struggling students, children with disabilities, the teachers and other educators who work with them, and their families. This involves a decrease in time spent on traditional models of intervention (e.g., pull-out therapy) and more time on consultation and classroom-based intervention. It also means allocation and assignment of staff based on time needed

for indirect services and support activities, and not based solely on direct services to children with disabilities.

New and Expanded Roles

SLPs working in districts that choose to implement RTI procedures are uniquely qualified to contribute in a variety of ways to assessment and intervention at many levels, from system wide *program design* and *collaboration* to work with *individual students*. SLPs offer expertise in the language basis of literacy and learning, experience with collaborative approaches to instruction/intervention, and an understanding of the use of student outcomes data when making instructional decisions.

Program Design

SLPs can be a valuable resource as schools design and implement a variety of RTI models. The following functions are some of the ways in which SLPs can make unique contributions:

- Explain the role that language plays in curriculum, assessment, and instruction, as a basis for appropriate program design
- Explain the interconnection between spoken and written language
- Identify and analyze existing literature on scientifically based literacy assessment and intervention approaches
- Assist in the selection of screening measures
- Help identify systemic patterns of student need with respect to language skills
- Assist in the selection of scientifically based literacy intervention
- Plan for and conduct professional development on the language basis of literacy and learning
- Interpret a school's progress in meeting the intervention needs of its students

Collaboration

SLPs have a long history of working collaboratively with families, teachers, administrators, and other special service providers. SLPs play critical roles in collaboration around RTI efforts, including the following:

- Assisting general education classroom teachers with universal screening
- Participating in the development and implementation of progress monitoring systems and the analysis of student outcomes
- Serving as members of intervention assistance teams, utilizing their expertise in language, its disorders, and treatment
- Consulting with teachers to meet the needs of students in initial RTI tiers with a specific focus on the relevant language underpinnings of learning and literacy
- Collaborating with school mental health providers (school psychologists, social workers, and counselors), reading specialists, occupational therapists, physical therapists, learning disabilities specialists, and other specialized instructional support personnel (related/pupil services personnel) in the implementation of RTI models
- Assisting administrators to make wise decisions about RTI design and implementation, considering the important language variables

- Working collaboratively with private and community-employed practitioners who may be serving an individual child
- Interpreting screening and progress assessment results to families
- Helping families understand the language basis of literacy and learning as well as specific language issues pertinent to an individual child

Serving Individual Students

SLPs continue to work with individual students, in addition to providing support through RTI activities. These roles and responsibilities include the following:

- Conducting expanded speech sound error screening for K-3 students to track students at risk and intervene with those who are highly stimulable and may respond to intense short-term interventions during a prolonged screening process rather than being placed in special education
- Assisting in determining "cut-points" to trigger referral to special education for speech and language disabilities
- Using norm-referenced, standardized, and informal assessments to determine whether students have speech and language disabilities
- Determining duration, intensity, and type of service that students with communication disabilities may need
- Serving students who qualify for special education services under categories of communication disabilities such as speech sound errors (articulation), voice or fluency disorders, hearing loss, traumatic brain injury, and speech and language disabilities concomitant with neurophysiological conditions
- Collaborating with classroom teachers to provide services and support for students with communication disabilities
- Identifying, using, and disseminating evidence-based practices for speech and language services or RTI interventions at any tier.

IDEA '04 does not mandate significant change or prohibit traditional practices. Rather, it encourages the adoption of new approaches that promise better student outcomes. Such innovations in education offer numerous opportunities to enhance speech-language services to the benefit of all students."

For more information on Response to Intervention

- ND Dept of Public Instruction, Office of Special Education's Response to Intervention webpage http://www.dpi.state.nd.us/speced1/personnel/index.shtm.

- "New Roles in Response to Intervention: Creating Success for Schools and Children"; A Collaborative Project With: The American Speech-Language-Hearing Association (ASHA), Council of Administrators of Special Education (CASE), Council for Exceptional Children (CEC), Council for Learning Disabilities (CLD), Division for Learning Disabilities (DLD), International Dyslexia Association (IDA), International Reading Association (IRA). Learning Disabilities Association of America (LDA), National Association of State Directors of Special Education (NASDSE), National Association of School Psychologists (NASP), National Center for Learning Disabilities (NCLD), National Education Association (NEA), and School Social Work Association of America (SSWAA); November 2006.
http://www.asha.org/uploadedFiles/slp/schools/prof-consult/rtiroledefinitions.pdf#search=%22New%22.

- Response To Intervention: Policy Considerations and Implementation; National Association of State Directors of Special Education, Inc.; 4th printing February 2006. http://www.nasdse.org

- Making RTI Work: A Practical Guide to Using Data for a Successful "Response to Intervention" Program (for a free copy, call 800-338-4204 or visit http://www.renlearn.com/rti/)

- The American Speech-Language-Hearing Association (ASHA) Response to Intervention (RTI) website: http://www.asha.org/slp/schools/prof-consult/RtoI.htm

Literacy

The speech-language pathologist's background in language is a valuable asset to educators when addressing strategies to enhance literacy. The speech-language pathologist may serve as a member of a team developing strategies to enhance literacy of all students, provide services in collaboration with other educators, or provide direct services to children with oral language deficits that limit their access to literacy. When collaborating with teachers in a classroom, the speech-language pathologist may target the students with speech-language impairments who have oral and/or written language deficits. This collaboration may provide an incidental benefit to all students in the classroom. Rather than teaching the curriculum, speech-language pathologists use the curriculum as a source of stimulus materials for the children they serve. This practice will give the children more exposure to the general curriculum and enhance their ability to generalize their skills.

Speech-language pathologists (SLPs) play a critical and direct role in the development of literacy for children and adolescents with communication disorders, including those with severe or multiple disabilities. SLPs also make a contribution to the literacy efforts of a school district or community on behalf of all students. These roles are implemented in collaboration with others who have expertise in the development of written language and vary with settings and experience of those involved. (Roles and Responsibilities of Speech-Language Pathologists With Respect to Reading and Writing in Children and Adolescents, ASHA 2001)

Appropriate roles and responsibilities for SLPs are dynamic in relation to the evolving knowledge base. These roles include, but are not limited to:
- Preventing written language problems by fostering language acquisition and emergent literacy
- Identifying children at risk for reading and writing problems
- Assessing reading and writing
- Providing intervention and documenting outcomes for reading and writing

Identification

Preventing written language problems involves working with others in indirect or direct facilitative roles to ensure that young children have opportunities to participate in emergent language activities, both at home and in preschool. SLPs also play important roles to assure that older children with developmental delays or multiple disabilities gain access to such activities. Strategies for supporting emergent literacy and preventing literacy problems include (a) joint book reading, (b) environmental print awareness, (c) conventions/concepts of print, (d) phonology and phonological awareness, (e) alphabetic/letter knowledge, (f) sense of story, (g) adult modeling of literacy activities, and (h) experience with writing materials.

Early identification roles and responsibilities include (a) designing literacy-sensitive early identification activities, (b) assisting in the design and implementation of response-to-intervention strategies, (c) helping teachers and other professionals with early recognition of language factors associated with later literacy problems, (d) collaborating with other

professionals to identify risk factors, (e) participating on pre-referral child study teams, and (f) consulting with others regarding when diagnostic assessments are needed.

Identification of literacy problems among older students entails (a) educating other professionals regarding risk factors involving all language systems, (b) participating on pre-referral child study teams, (c) recognizing added literacy risks for children being treated for spoken language difficulties, (d) interviewing students, parents, and teachers about curriculum-based language difficulties, (e) monitoring classroom progress and other situations that justify formal referral for assessment or reassessment,(f) implementing strategies for building curriculum relevance and for teaching self-advocacy skills to students with language disorders, and (g) suggesting dynamic assessment strategies to identify whether a language difference or disorder might be at the root of literacy challenges. Dynamic assessment is an interactive approach to conducting assessments that focuses on the ability of the learner to respond to intervention.

Assessing written language involves collaborating with parents, teachers, and other service providers to collect information using both formal and informal tools and methods, all of which are selected to be developmentally and culturally/linguistically appropriate. SLPs may either administer formal tests themselves or work as team members with others who administer the tests of reading and writing. The unique knowledge that SLPs bring to this process is their ability to assess the subsystems of language—phonology, morphology, syntax, semantics, and pragmatics—as they relate to spoken and written language. SLPs can contribute information about the degree to which a student has basic knowledge at the level of sounds, words, sentences, and discourse. Assessment activities are designed to answer questions about whether students are using their basic language knowledge and metalinguistic and metacognitive skills for reading processes involved in decoding, comprehending, and paraphrasing what they read, and for writing processes involved in spelling words, organizing discourse texts, formulating and punctuating sentences, and revising, editing, and presenting their work.

In conclusion, language problems are both a cause and a consequence of literacy problems. SLPs have the expertise and the responsibility to play important roles in ensuring that all children gain access to instruction in reading and writing, as well as in other forms of communication. SLPs have appropriate roles related to all aspects of professional activity, including prevention, identification, assessment, intervention, and participation in the general literacy efforts of a community. These roles and responsibilities vary with the characteristics and needs of the children and adolescents being served and with the work settings and experiences of the professionals involved.

For additional guidance refer to *Roles and Responsibilities of Speech-Language Pathologists With Respect to Reading and Writing in Children and Adolescents* at http://www.asha.org/docs/html/GL2001-00062.html

Limited English Proficiency (LEP)

Linguistically and culturally diverse students present a unique challenge to school districts because these students often demonstrate communication behaviors similar to those exhibited by students with language disorders. The speech-language pathologist is challenged to differentiate language differences from language disorders. LEP students are eligible for speech-language services in the schools only if a speech-language disorder can be demonstrated in the native language and in English. LEP students are not eligible for speech-language services if their communication problems are the result of learning English.

Speech and language pathologists must understand the first as well as the second language acquisition process in order to adequately assess the communication skills of students with LEP. They must be familiar with current information available on the morphological, semantic, syntactic, pragmatic, and phonological development of children from a non-English language background to be able to distinguish a communication difference from a communication disorder in bilingual or multi-lingual children. Eligibility for special education with a speech-language impairment must be based on the presence of a speech-language impairment in the student's first language, not the student's limited English proficiency. Care must be given to determine the cause of the communication skill deficits. The assessment team must also consider the length of time the student has been exposed to English, and the amount and consistency of formal education the student has received.

A child with limited English proficiency (LEP) is defined in the No Child Left Behind Act of 2001, as follows:
   "An LEP student is classified as one:
   A. who is aged 3 through 21;
   B. who is enrolled or preparing to enroll in an elementary school or secondary school;
   C. (i) who was not born in the United States or whose native language is a language other
       than English; and who comes from an environment where a language other than
       English is
     dominant; OR
       (ii)(I.) who is Native American or Alaska Native, or a native resident of outlying
           areas; and
           (II.) who comes from an environment where a language other than English has
           had a significant impact on the individual's level of English language proficiency;
           OR
       (iii) who is migratory, whose native language is a language other than English, and
       who comes from an environment where a language other than English is dominant;
       AND
    D. whose difficulties speaking, reading, writing or understanding the English language
       may be sufficient to deny the individual
        i. the ability to meet the State's proficient level of achievement on State assessments
        ii. the ability to achieve successfully in classrooms where the language of instruction
            is English, or
       iii. the opportunity to participate fully in society." [(Public Law 107-110, Title IX,
            Part A, Sec. 9101, (25)]

In the assessment process, the speech-language pathologist will be part of an interdisciplinary team that may include English as a Second Language (ESL) teachers, bilingual professionals, qualified interpreters and translators, in addition to the traditional members of special education teams. This team will ensure that the relevant information is compiled, including immigration background and personal life such as separation from family, trauma or exposure to war or other conflicts, length of time the student has been learning the English language, and the type of instruction and informal learning opportunities. The team will gather this information by interviewing the parents or family members, by reviewing records, or by contacting staff from the agencies or organizations that may be working with the family.

When a child with limited English proficiency is referred for an evaluation for special education, the following practices should guide the assessment:
♦ Become familiar with the student's cultural communication norms. Analysis of the English errors of phonology, morphology or syntax should include consideration of the phonology, morphology, syntax, semantics and pragmatics of the student's native language.
♦ **Use a dynamic assessment approach** in order to assess the student's ability to learn in English. This model is characterized by a test-teach-retest format. The SLP should carefully assess the student's "responsiveness to instruction, her ability to transfer learning to new situations, and the amount of examiner effort that was required during the assessment." (Roseberry-McKibbin, 2007)
♦ Use trained interpreters when interviewing the family or talking to the child in a language other than English.
♦ Interview the family (or staff from agencies involved with the child) regarding the child's communication skills in comparison with those of peers, siblings, and parents.
♦ Assess parental concerns about communication skills in the student's first language.
♦ Collaborate with ESL teacher to assess student's rate of acquisition of English.
♦ Use standardized tests with caution. If the normative sample for the test did not include a comparable group or if the testing procedures were modified, scores should not be reported.
♦ Review the child's written work to identify any language patterns.
♦ Complete an MLU assessment in both languages.

At any point in the process of acquiring second language (L2) proficiency, a student may appear to have language delays or even language disorders as observed in the classroom. Making a differential diagnosis is challenging for both the bilingual and monolingual speech-language pathologist. However, if the speech-language pathologist's analysis shows that English errors are due to interference caused by learning L2, a disorder would not be indicated, but rather a characteristic of second language acquisition. The table below contrasts the characteristics of students with limited English proficiency alone and limited English proficiency in conjunction with a communication impairment.

Comparison of Children with Limited English Proficiency—
With and Without Disabilities

Characteristics	Child with limited English proficiency	Child with limited English proficiency and a disability
Communication Skills	Normal language learning potential. Communicative use of English is reduced and easily noted by native English speakers. English phonological errors common to culture. No fluency or voice impairment. Can be communicatively proficient to function in society.	May exhibit speech and language disorders in the areas of articulation (atypical phonology or prosody), voice, fluency, or receptive and expressive language; may not always achieve communicative competence in either first or second language. May exhibit communication behaviors that call attention to himself/herself in L1.
Language Skills	Skills are appropriate for age level prior to exposure to L2. The nonverbal communication skills are culturally appropriate for age level (e.g., eye contact, response to speaker, clarification of response, turn taking). Vocabulary deficit and word-finding difficulties in L2 only. Student may go through a silent period. Code switching common.	May have deficits in vocabulary and word finding, following directions, sentence formulation, and pragmatics in either L1 or L2. Atypical syntactic and morphological errors. Persistent errors in L2. Low mean length of utterance (MLU) in both languages. Difficulties in first language and English cannot be attributed to length of time in English-speaking schools. Stronger performance on tests assessing single word vocabulary than on tests assessing understanding of sentences or paragraphs.
Academic Functioning	Normal language learning potential. Apparent problems due to culturally determined learning style, different perceptual strategies, or lack of schooling.	May observe limited progress in second language acquisition, difficulty retaining academic information, difficulty in schoolwork in home language, or difficulty acquiring the first language.
Progress	Progress in home language is contingent upon adequacy and continuation of first language instruction. Academic progress in English should be steady, but will depend on the quality and quantity of English instruction.	May show less than expected progress in English acquisition and development of academic skills. May show a marked or extreme discrepancy between different areas (e.g. oral skills and writing skills) that cannot be attributed to lack of sufficient time or appropriate interventions.
Social Abilities	No social problems in L1. May have some social problems due to lack of familiarity with American customs, language, expected behaviors, etc. Student may experience social isolation and may be likely to be a follower rather than a leader in a group of English speakers.	May exhibit persistent social and behavioral problems that are in L1 and his/her native culture and not attributable to adjustment and acculturation.

Table from The Virginia Department of Education Speech-Language Guidelines

L1 = Student's first language   L2 = Student's second language

Working With Foreign Language Interpreters and Translators

Interpreters can be used when there are no available speech-language pathologists fluent in the language of the child. The interpreter functions as a link between the school culture and the culture of the student's family. The use of a trained interpreter is preferable to the use of a family member. The speech-language pathologist should meet with the interpreter to explain the purpose and protocols for the assessment, provide descriptions of English terminology, and stress confidentiality. The interpreter who speaks the student's native language should be used during all parts of the evaluation, including student testing, collecting communication samples, and communicating with the student's parents. It is recommended that SLPs state in their written evaluations that a translator was used.

Other Important Considerations in Second Language Acquisition

- Basic Interpersonal Communication Skills (BICS) is the initial conversational language of L2 produced and understood by second language learners. Research shows that it may take up to three years for a limited-English-proficient student to acquire BICS. The language-learning continuum leads from survival and social language (BICS) to the complex academic language needed for school success.
- Cognitive Academic Language Proficiency (CALP) is the complex, academic language that is needed for success in school. It can take from five to ten years to develop this level and type of proficiency depending on variables specific to the individual learner. CALP is needed to perform the higher-level thinking skills delineated in Bloom's taxonomy such as analysis, synthesis, and evaluation.
- Code Switching is a stage in second language acquisition of typical learners when words from both the first and second languages are used. This term is also known as language mixing.

Additional Resources for Working With Students With LEP
- ND Dept of Public Instruction http://www.dpi.state.nd.us/bilingul/index.shtm
- Using Interpreters, American Speech-Language-Hearing Association (ASHA) http://www.asha.org/practice/multicultural/issues/cb.htm
- American Speech-Language-Hearing Association (2009). *No Child Left Behind Fact Sheet on Assessment of English Language Learners.* Available from http://www.asha.org/uploadedFiles/advocacy/federal/nclb/NCLBELLAssess.pdf#search=%22No%22.
- American Speech-Language-Hearing Association. (2004). *Knowledge and Skills Needed by Speech-Language Pathologists and Audiologists to Provide Culturally and Linguistically Appropriate Services* [Knowledge and Skills]. Available from http://www.asha.org/policy/KS2004-00215.htm.
- Roseberry-McKibbin & O'Hanlon (2005). Nonbiased assessment of English language learners: A tutorial. *Communication Disorders Quarterly, 26,* 178-185.

Autism

Autism is a lifelong disability due to neurological factors which results in distinct learning and behavioral characteristics. All children with Autism demonstrate deficits in 1) social interaction, 2) verbal and nonverbal communication, and 3) repetitive behaviors or interests. In addition, they will often have unusual responses to sensory experiences, such as certain sounds or the way objects look. Each child will display communication, social, and behavioral patterns that are individual but fit with the overall diagnosis of Autism. Symptoms range from mild to severe.

According to the United States Department of Education, Autism represents the fastest growing diagnosis within the disability category of Pervasive Developmental Disorders (PDD). The Autism Society of America estimates the annual cost of caring for and educating individuals with Autism to be around 90 billion dollars. Early intervention and identification have shown the potential to reduce the treatment costs by two-thirds.

The DSM-IV provides five deficit areas to consider as diagnostic criteria for identifying individuals with Autism: communication, socialization/social skills, restricted interests, sensory integration and behavior. Eligibility decisions within the educational setting must be made with the team decision-making process as designated by the Individual with Disabilities Education Improvement Act of 2004 (IDEA, 2004). Within a public school setting eligibility for services under the disability category of Autism is based on the definition provided in IDEA:

> "Autism means a developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before 3, which adversely affects a child's educational performance. Other characteristics often associated with Autism are engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in routines, and unusual response to sensory experiences. The term does not apply if a child's educational performance is adversely affected primarily because the child has an emotional disturbance as defined by the IDEA criterion.

> A child who manifests the characteristics of "Autism" after age 3 could be diagnosed as having "Autism" if the criteria in the preceding paragraph are met. (34 C.F.R. § 300.7 [c])"

It is the position of the American Speech-Language-Hearing Association (ASHA) that speech-language pathologists play a critical role in screening, diagnosing, and enhancing the social communication development of students with Autism. Diagnostic criteria emphasize all individuals with Autism are challenged in the area of social communication. Many have difficulty acquiring the form and content of language necessary to communicate. Individuals with Autism may have difficulty with such things as joint attention, shared enjoyment, social reciprocity in nonverbal as well as verbal interactions, mutually satisfying play and peer interaction, comprehension of others' intention, and emotional regulation. Autism is primarily a social communication disability.

The SLP's role is critical in supporting students with Autism. IEP teams must ensure that students with Autism have goals and objectives designed to promote communication, independent living, academic skills, and appropriate social behaviors. These goals need to be introduced early and addressed annually. Waiting to address these skill deficits until a child reaches secondary school creates the potential for many students with Autism leaving the educational setting ill-prepared to live independently, succeed academically in the post-secondary setting, or be gainfully employed. No single intervention or approach has proven to be effective for every individual.

Students with Autism require direct instruction because they do not generalize skills across educational and social contexts. Speech-language pathologists should provide services connected with functional and meaningful outcomes. A variety of service delivery options should be considered to develop the student's functional skills in all environments emphasizing those needed in the natural learning environment. The benefits of appropriate educational services, including speech-language pathology services, may improve the quality of life for students with Autism and their families.

Additional Resources

- The North Dakota Autism Guidelines: http://www.dpi.state.nd.us/speced1/guide/autism.pdf

- The American Speech-Language-Hearing Association, 2006 Guidelines for Speech-language Pathologists in Diagnosis, Assessment, and treatment of Autism Spectrum Disorders Across the Life Span: www.asha.org/docs/html/PS2006-00105.html

- The Puzzle of Autism, NEA Professional Library 2006 at: http://www.nea.org/assets/docs/HE/autismpuzzle.pdf

(Central) Auditory Processing Disorder

Simply stated, an auditory processing disorder (APD) refers to how the central nervous system (CNS) uses auditory information. Auditory processing disorders are not fully understood by the medical or the educational communities because they are complex disorders with a myriad of symptoms. (Bellis, Terri, *Understanding Auditory Processing Disorders in Children*, ASHA Consumer Information Newsletter, 2004.) Dr. Bellis maintains that the term "auditory processing" has been used loosely to mean many different things and the APD label has been applied incorrectly to a wide variety of difficulties and disorders. This has led to differing views of APD: from doubt as to whether it is its own distinct disorder, to assumptions that any child who has difficulty listening or understanding spoken language has an auditory processing disorder.

The diagnosis of true APD can only be made by an audiologist. Typically, the audiologist will consider assessment data gathered by the multidisciplinary team, which may include cognitive, language, academic, social-emotional and/or behavioral information. The multidisciplinary evaluation team approach is necessary to fully understand the cluster of problems associated with APD.

Team members should recognize that APD can co-exist with other disorders such as attention deficit disorder, speech-language impairment, and specific learning disability. In other words, there are other disorders that can affect the CNS in the areas of memory, attention, and language. Since APD is an auditory deficit that is not the result of higher-order cognitive, language or other related factors, APD should not be classified as a learning disability. By itself, APD is not recognized under the Individuals with Disabilities Education Act (IDEA) as a disability that requires specialized instruction (special education). However, if a student is already receiving special education and related services under a different disability category, the IEP team should consider how an APD is impacting a student in the classroom and identify ways to address it.

There are no clear-cut ways to isolate symptoms from other co-existing disorders to those specific only to auditory processing disorders. Regardless, when symptoms adversely affect a student's academic success and if the student is eligible for special education and related services under a specific IDEA disability category, the IEP team should explore interventions or strategies that would provide additional support to the student in the classroom. If a student qualifies for specialized instruction under one disability area, it would certainly be within the IEP team's role and responsibility to identify all areas of academic difficulty and to provide appropriate accommodations or strategies that would ensure access to the curriculum.

For more information on Auditory Processing Disorders, see ASHA's Technical Report on (Central) Auditory Processing Disorders (2005) at http://www.asha.org/docs/html/TR2005-00043.html.

The following ASHA newsletter article on APD in children may be reproduced.

AUDIOLOGY
INFORMATION SERIES

ASHA'S CONSUMER NEWSLETTER

Understanding Auditory Processing Disorders in Children

by Teri James Bellis, PhD, CCC-A

In recent years, there has been a dramatic upsurge in professional and public awareness of Auditory Processing Disorders (APD), also referred to as Central Auditory Processing Disorders (CAPD). Unfortunately, this increase in awareness has resulted in a plethora of misconceptions and misinformation, as well as confusion regarding just what is (and isn't) an APD, how APD is diagnosed, and methods of managing and treating the disorder. The term auditory processing is often used loosely by individuals in many different settings to mean many different things, and the label APD has been applied (often incorrectly) to a wide variety of difficulties and disorders. As a result, there are some who question the existence of APD as a distinct diagnostic entity and others who assume that the term APD is applicable to any child or adult who has difficulty listening or understanding spoken language. The purpose of this article is to clarify some of these key issues so that readers are better able to navigate the jungle of information available on the subject in professional and popular literature today.

Terminology and Definitions

In its very broadest sense, APD refers to how the central nervous system (CNS) uses auditory information. However, the CNS is vast and also is responsible for functions such as memory, attention, and language, among others. To avoid confusing APD with other disorders that can affect a person's ability to attend, understand, and remember, it is important to emphasize that APD is an auditory deficit that is not the result of other higher-order cognitive, language, or related disorders.

There are many disorders that can affect a person's ability to understand auditory information. For example, individuals with Attention Deficit/Hyperactivity Disorder (ADHD) may well be poor listeners and have difficulty understanding or remembering verbal information; however, their actual neural processing of auditory input in the CNS is intact. Instead, it is the attention deficit that is impeding their ability to access or use the auditory information that is coming in. Similarly, children with autism may have great difficulty with spoken language comprehension. However, it is the higher-order, global deficit known as autism that is the cause of their difficulties, not a specific auditory dysfunction. Finally, although the terms language processing and auditory processing sometimes are used interchangeably, it is critical to understand that they are not the same thing at all.

For many children and adults with these disorders and others—

No matter how successful a particular therapy approach may have been for another child, it does not mean that it will be effective for your child.

including mental retardation and sensory integration dysfunction—the listening and comprehension difficulties we often see are due to the higher-order, more global, or all-encompassing disorder and not to any specific deficit in the neural processing of auditory stimuli per se. As such, it is not correct to apply the label APD to these individuals, even if many of their behaviors appear very similar to those associated with APD. In some cases, however, APD may co-exist with ADHD or other disorders. In those cases, only careful and accurate diagnosis can assist in disentangling the relative effects of each.

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Diagnosing APD

Children with APD may exhibit a variety of listening and related complaints. For example, they may have difficulty understanding speech in noisy environments, following directions, and discriminating (or telling the difference between) similar-sounding speech sounds. Sometimes they may behave as if a hearing loss is present, often asking for repetition or clarification. In school, children with APD may have difficulty with spelling, reading, and understanding information presented verbally in the classroom. Often their performance in classes that don't rely heavily on listening is much better, and they typically are able to complete a task independently once they know what is expected of them. However, it is critical to understand that these same types of symptoms may be apparent in children who do not exhibit APD. Therefore, we should always keep in mind that not all language and learning problems are due to APD, and all cases of APD do not lead to language and learning problems. APD cannot be diagnosed from a symptoms checklist. No matter how many symptoms of APD a child may have, only careful and accurate diagnostics can determine the underlying cause.

A multidisciplinary team approach is critical to fully assess and understand the cluster of problems exhibited by children with APD. Thus, a teacher or educational diagnostician may shed light on academic difficulties; a psychologist may evaluate cognitive functioning in a variety of different areas; a speech-language pathologist may investigate written and oral language, speech, and related capabilities; and so forth. Some of these professionals may actually use test tools that incorporate the terms "auditory processing" or "auditory perception" in their evaluation, and may even suggest that a child exhibits an "auditory processing disorder." Yet it
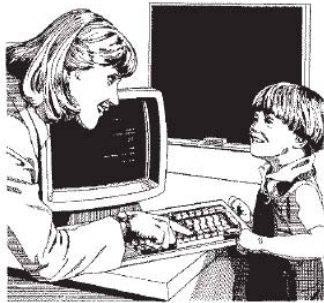
The key to appropriate treatment is accurate and careful diagnosis by an audiologist.

is important to know that, however valuable the information from the multidisciplinary team is in understanding the child's overall areas of strength and weakness, none of the test tools used by these professionals are diagnostic tools for APD, and the actual diagnosis of APD must be made by an audiologist.

To diagnose APD, the audiologist will administer a series of tests in a sound-treated room. These tests require listeners to attend to a variety of signals and to respond to them via repetition, pushing a button, or in some other way. Other tests that measure the auditory system's physiologic responses to sound may also be administered. Most of the tests of APD require that a child be at least 7 or 8 years of age because the variability in brain function is so marked in younger children that test interpretation may not be possible.

Once a diagnosis of APD is made, the nature of the disorder is determined. There are many types of auditory processing deficits and, because each child is an individual, APD may manifest itself in a variety of ways. Therefore, it is necessary to determine the type of auditory

deficit a given child exhibits so that individualized management and treatment activities may be recommended that address his or her specific areas of difficulty.

Treating APD

It is important to understand that there is not one, sure-fire, cure-all method of treating APD. Notwithstanding anecdotal reports of "miracle cures" available in popular literature or on the Internet, treatment of APD must be highly individualized and deficit-specific. No matter how successful a particular therapy approach may have been for another child, it does not mean that it will be effective for your child. Therefore, the key to appropriate treatment is accurate and careful diagnosis by an audiologist.

Treatment of APD generally focuses on three primary areas: changing the learning or communication environment, recruiting higher-order skills to help compensate for the disorder, and remediation of the auditory deficit itself. The primary purpose of environmental modifications is to improve access to auditorily presented information. Suggestions may include use of electronic devices that assist listening, teacher-oriented suggestions to improve delivery of information, and other methods of altering the learning environment so that the child with APD can focus his or her attention on the message.

Compensatory strategies usually consist of suggestions for assisting listeners in strengthening central resources (language, problem-solving, memory, attention, other cognitive skills) so that they can be used to help overcome the auditory disorder. In addition, many compensatory strategy approaches teach children with APD to take responsibility for their own listening success or failure and to be an active participant in daily listening activities through a variety of active listening and problem-solving techniques.

Finally, direct treatment of APD

seeks to remediate the disorder, itself. There exists a wide variety of treatment activities to address specific auditory deficits. Some may be computer-assisted, others may include one-on-one training with a therapist. Sometimes home-based programs are appropriate whereas others may require children to attend therapy sessions in school or at a local clinic. Once again, it should be emphasized that there is no one treatment approach that is appropriate for all children with APD. The type, frequency, and intensity of therapy, like all aspects of APD intervention, should be highly individualized and programmed for the specific type of auditory disorder that is present.

The degree to which an individual child's auditory deficits will improve with therapy cannot be determined in advance. Whereas some children with APD experience complete amelioration of their difficulties or seem to "grow out of" their disorders, others may exhibit some residual degree of deficit forever. However, with appropriate intervention, all children with APD can learn to become active participants in their

It is important to emphasize that APD is an auditory deficit that is not the result of other higher-order cognitive, language, or related disorders.

own listening, learning, and communication success rather than hapless (and helpless) victims of an insidious impairment. Thus, when the journey is navigated carefully, accurately, and appropriately, there can be light at the end of the tunnel for the millions of children afflicted with APD.

Key Points:

- APD is an auditory disorder that is not the result of higher-order, more global deficit such as autism, mental retardation, attention deficits, or similar impairments.
- Not all learning, language, and communication deficits are due to APD.
- No matter how many symptoms of APD a child has, only careful and accurate diagnosis can determine if APD is, indeed, present.
- Although a multidisciplinary team approach is important in fully understanding the cluster of problems associated with APD, the diagnosis of APD can only be made by an audiologist.
- Treatment of APD is highly individualized. There is no one treatment approach that is appropriate for all children with APD.

To locate an audiologist in your area, contact the American Speech-Language-Hearing Association at www.asha.org or 800-638-8255. More detailed information about APD for general readers is available in *When the Brain Can't Hear: Unraveling the Mystery of Auditory Processing Disorder* by Teri James Bellis (2002, Pocket Books), available online or at bookstores everywhere.

For more information about hearing loss, hearing aids, or referral to an ASHA-certified audiologist, contact the:

AMERICAN
SPEECH-LANGUAGE-
HEARING
ASSOCIATION

10801 Rockville Pike
Rockville, MD 20852
1-800-638-8255 (Voice or TTY)
Email: actioncenter@asha.org
Website: www.asha.org

Compliments of
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and

Deaf and Hard of Hearing

Although students who are deaf and hard of hearing will work primarily with teachers of the deaf and hard of hearing (henceforth referred to as Teacher), the speech-language pathologist will frequently be the school-based person who works with classroom teachers when students are using FM auditory trainers or other sensory devices. The speech-language pathologist should work closely with the audiologist and teacher of the deaf to ensure that the settings are appropriate for the child's hearing and be proficient in trouble-shooting simple problems.

Due to the advancements in technology surrounding cochlear implants, it is more common for children to be entering school with cochlear implants. These students will need assistance from the school-based speech-language pathologists to develop their auditory-oral skills. Speech-language pathologists who are not up-to-date in their skills in this area should participate in professional development to renew their skills.

Specialized Roles of Speech-Language Pathologists

SLPs have the specialized preparation, experiences, and opportunities to address communication effectiveness, communication disorders, differences, and delays due to a variety of factors including those that may be related to hearing loss. SLPs provide services to a wide range of communication needs. SLPs in educational settings contribute to students' communicative competence and academic achievement including literacy (Montgomery, 1998). SLPs have the knowledge and skills to address the complex interplay of the areas of listening, speaking, reading, writing, and thinking. Furthermore, they understand how skill expansion in one of these components enhances performance in another area ultimately contributing to the overall development of literacy and learning.

The document *Knowledge and Skills Required for the Practice of Audiologic/Aural Rehabilitation* indicates that SLPs providing services to individuals who are deaf or hard of hearing should have knowledge of and skills that include, but are not limited to, the following areas of expertise (ASHA, 2001):
- normal communicative development and the effects of hearing loss on communicative development;
- the assessment of communicative skills and intervention with individuals with hearing loss; and
- the prevention of communicative issues

The scope of practice in speech-language pathology (ASHA, 2007) includes providing services to individuals with hearing loss and their families/caregivers, (e.g., auditory training; speechreading supports; speech and language intervention secondary to hearing loss; visual inspection and listening checks of amplification devices for the purpose of troubleshooting, including verification of appropriate battery voltage).

Understanding the Role of the Teacher of the Deaf and Hard of Hearing

Teacher education programs prepare teachers to plan and deliver the child's educational program, including the development of communicative competence within a variety of social, linguistic and cognitive/academic contexts. Teachers provide educational programming to children in center schools for deaf or hard of hearing children as well as in schools and programs that serve hearing, deaf, and hard of hearing children. These settings include self-contained classrooms, resource rooms, general education classrooms, and itinerant, home, or community-based settings.

Teachers are familiar with child development from infancy through adolescence. In addition to a common core of knowledge required to teach deaf or hard of hearing children, Teachers have a foundation of knowledge in a professional specialization (CED, 2001). Teachers with specialization in parent/infant education are prepared to work with families and very young children as part of an interdisciplinary team of professionals (Joint Committee of ASHA-CED, 1994). Specialization in early childhood addresses the development and educational needs of children and their families in the pre-primary years. Teachers specializing in elementary education typically are prepared to instruct in all academic areas and work collaboratively with parents and other professionals in elementary education settings. Teachers with specialization in multiple disabilities have an understanding of the concomitant effects of hearing loss and atypical developmental, social, emotional, motor, and physical conditions. Secondary education specialists have extensive knowledge in an educational content area and adolescent development.

Teachers are knowledgeable about both general education including the natural and behavioral sciences and humanities and pedagogy. Teachers are prepared to educate children who exhibit a range of learning abilities, challenges, and styles. Coursework and practica integrate cultural, linguistic, and socio-economic perspectives including the socio-cultural and linguistic phenomena associated with deafness. In addition, teacher preparation programs direct teachers to promote the child's sense of identity by collaborating with adults and peers who are social, cultural, and linguistic role models (Christensen, 2000; Cohen, 1997; Cohen, 1993; Cohen, Fischgrund, & Redding, 1990).

Teachers plan for and educate children who are deaf or hard of hearing with varying backgrounds, abilities, and characteristics. Regardless of setting, Teachers—in collaboration with other professionals—provide, facilitate, monitor, and evaluate the development of communicative competence and literacy of children who are deaf or hard of hearing. Working closely with families, Teachers support family involvement and facilitate communication within the family. Teachers who have earned CED (Council on Education of the Deaf) certification are prepared to provide educational and communicative experiences that are developmentally and individually appropriate.

Collaborative Responsibilities

Children who are deaf or hard of hearing constitute a heterogeneous population whose abilities and needs may require the SLP and the Teacher to combine their expertise toward the development of communicative competence for these children. In addition, as the age and abilities of the child change over time, the professionals may also have to modify their roles. Collaborative responsibilities may include the following:

- Consider relevant background information (family history, medical information, previous assessments, reports, and observations) for the purposes of program planning;
- Obtain a comprehensive description of communicative and linguistic abilities and needs of the child, history of communication modalities and languages (signed and/or spoken) used and/or tried, family preferences, and concerns related to communication.
- Administer and interpret appropriate formal and informal, standardized and nonstandardized assessments of all areas of communicative competence.
- Develop communicative competence goals and objectives that address the general curriculum for the child; incorporating recommendations and findings of the family and interdisciplinary team;
- Identify individuals responsible for the design and implementation of an instructional program and related services to assist the child in achieving the identified goals and objectives;
- Evaluate the child's progress as related to the goals;

- Evaluate the program or related services provided;
- Provide progress reports to families on a regular basis and other professionals as consistent with federal requirements under IDEA;
- Determine the effectiveness of assistive technologies for the child in collaboration with the family and interdisciplinary team;
- Facilitate the development of social aspects of communication;
- Provide consultation, guidance, and education to children and young adults who are deaf or hard of hearing and to their families;
- Provide consultation and support to and or collaborate with professionals and paraprofessionals involved in the habilitation/educational program of the child;
- Consider overall learning strengths, weaknesses, differences, and/or delays which may be unrelated to hearing status for appropriate referral and/or educational planning;
- Collaborate with families and children regarding communicative and linguistic strengths and needs in planning appropriate educational, vocational, and/or career transitions;
- Assist families in receiving appropriate access to communicative and linguistic services for the child;
- Assist students in developing the skills and knowledge necessary for self-advocacy.

The Speech-Language Pathologist and Teacher of Deaf and Hard of Hearing will engage in a collaborative team approach to facilitate the development of communicative competence using one or a combination of service delivery models (ASHA, 1999, 2001). Service delivery is a dynamic concept varying according to the abilities and needs of the child. It is necessary for professionals to employ service delivery models that are most appropriate for the child and are based on the child's Individualized Education Program (IEP).

Adapted from "Roles of Speech-Language Pathologists and Teachers of Children Who Are Deaf and Hard of Hearing in the Development of Communicative and Linguistic Competence." Developed by the Joint Committee of the American Speech-Language-Hearing Association (ASHA) and the Council on Education of the Deaf (CED) in 2003. *American Speech-Language-Hearing Association. (2004).*

For information on North Dakota Deaf and Hard of Hearing policies, refer to the ND Dept of Public Instruction policy paper, "Deaf and Hard of Hearing Students in ND Schools"
http://www.dpi.state.nd.us/speced1/laws/policy/infopapr.pdf

Additional information may be found at the National Association of State Directors in Special Education (NASDSE)
http://www.NASDSE.org/Projects/DeafEducationInitiative/tabid/412/Default.aspx

Dysphagia

Dysphagia is a disorder in swallowing that is a part of the SLP scope of practice in the public schools. It is important that SLPs be an integral part of the team that manages students with swallowing and feeding problems in school settings.

As with other areas of speech-language, ASHA states that only persons possessing a "competent level of education, training, and experience" should conduct assessment and intervention (ASHA, 2003). Staying abreast of new developments in the field is the responsibility of the individual speech-language pathologist. Any speech-language pathologist working with children with dysphagia should ensure that his/her skills are current.

School personnel should be observant of:
- Overt signs of aspiration, such as coughing, choking or runny nose
- Difficulty chewing and moving the food from the front to the back of the mouth, pocketing, food falling from mouth
- Complaints of food "getting stuck in the throat"
- Recurrent aspiration pneumonia
- Significant weight loss with resulting fragility
- Reduced alertness and attention in the classroom
- Reduced strength and vitality
- Weakened health status
- Frequent, prolonged absences due to health issues; and limited social interaction and communication during meals or snack time

A diagnosis of a swallowing disorder may occur as a result of a school assessment, a medical assessment, or may be part of another disability. If a student is determined to have a swallowing disorder, the following individuals may be beneficial team members:
- Speech-language pathologist
- Occupational therapist
- School nurse
- Child's teacher
- Nutritionist
- Cafeteria supervisor
- The child's parent

If a student receives special education and related services and needs direct intervention to improve swallowing skills, then this information should be documented in the present levels of academic and functional performance (PLAAFP), adaptations, and as an IEP goal, if appropriate.

For additional information on Dysphagia, refer to the Guidelines for SLPs providing *Swallowing and Feeding Services in the Schools* http://www.asha.org/docs/html/GL2007-00276.html

Assistive Technology/Augmentative and Alternative Communication

The availability of technology in general education and the school's responsibility to provide assistive technology in the educational setting has had a significant impact for children with disabilities. The availability of appropriate assistive technology (AT) services and devices for students with disabilities ensures their participation in both academic and social communities. The use of assistive technology can facilitate:

- An increase in student access to and participation in the general education curriculum
- An increase in productivity
- Expansion of a student's educational/vocational options
- Enhancement of communication opportunities
- Reduction of the amount of support services needed
- An increase in a student's independence

Every IEP team must consider whether the child requires assistive technology devices and services. IDEA 2004, Sec. 300.5 defines assistive technology devices as, *"…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 a child with a disability. The term does not include a medical device that is surgically implanted, or the replacement of such device."*

This definition allows IEP teams the flexibility they need to make decisions about appropriate assistive technology for individual students. These technology solutions can include a wide range of no-tech, low-tech, mid-tech, and high-tech devices, hardware, software, and other instructional technology tools that the student's IEP team may identify as educationally necessary. The team's considerations should not be limited to the devices and services currently available within the district.

Augmentative and Alternative Communication

Augmentative and alternative communication (AAC) includes all forms of communication that are used to express thoughts, needs, wants, and ideas that cannot be conveyed through oral communication. Students with severe speech or language problems rely on AAC to supplement existing speech or replace speech that is not functional. Special augmentative aids, such as picture and symbol communication boards and electronic devices, help students to express themselves and can increase their social interactions and school performance. However, student's who use AAC should not stop using speech if they are able to do so. The AAC devices should only be used to enhance communication.

Quist and Lloyd listed the following features of an ideal AAC system:

- Enables the individual to express a full range of communication functions.
- Compatible with other aspects of the individual's life.
- Considers needs and communication patterns of conversation partners.
- Usable in all environments and physical positions.
- Does not restrict the topic or the scope of communication.
- Enhances the effectiveness of the individual's communication.
- Allows and fosters continuous growth in the individual's linguistic and related skills.
- Acceptable and motivating for the individual and significant others.
- Affordable.
- Easily maintained and repaired.

Quist, R., & Lloyd, L. (1997). Principles and uses of technology. In L. Lloyd, D. Fuller, & H. Arvidson (Eds.), *Augmentative and alternative communication* (pp. 107–126). Boston: Allyn & Bacon.

ASHA has developed a number of documents outlining the role of the SLP with AAC. These documents include:

- Augmentative and Alternative Communication: Knowledge and Skills for Service Delivery: http://www.asha.org/docs/html/KS2002-00067.html
- Roles and Responsibilities of Speech-Language Pathologists With Respect to Augmentative and Alternative Communication: Position Statement at http://www.asha.org/docs/html/PS2005-00113.html
- Roles and Responsibilities of Speech-Language Pathologists With Respect to Augmentative and Alternative Communication: Technical Report at http://www.asha.org/docs/html/TR2004-00262.html

AT/AAC and the Role of the Speech-Language Pathologist
The SLP may be asked to operate in the role of case manager because communication is often a primary area of concern and one that influences all other aspects of a student's academic and functional performance. The SLP must be able to integrate information from multiple sources and disciplines in order to assist in designing an appropriate augmentative and alternative communication (AAC) program for a student. The scope of knowledge and amount of service required for the successful consideration, assessment, and implementation of AT services is so broad and intensive that it requires a collaborative team approach.

AT/AAC and the Special Education Process
The IEP team must consider the student's needs across all areas of his or her present levels of academic achievement and functional performance. Questions the IEP team should consider regarding assistive technology when planning for the unique needs of a student are contained in Appendix D of the NDDPI IEP Planning Process Guideline http://www.dpi.state.nd.us/speced1/laws/iep/IEP_Guide.pdf. To assist the IEP team in documenting the consideration of AT, the IEP team may use the suggested worksheet, *The WATI Assistive Technology Consideration Guide*, which is provided in Appendix C of the NDDPI IEP Planning Process Guideline.

There is no standardized battery of tests that comprise AAC evaluation, but several principles are generally associated with current recommended practices in relation to AAC assessment. The special education assessment process includes data gathering that enables consideration of the child's need for assistive technology.

The following series of questions can guide the evaluation and IEP teams as they consider the need for AT and specific types of AT.

- Does the child have any existing AT? If so, are the devices being used to their maximum benefit?
- What are the functional and academic areas of concern?
- What does the student need to be able to do that is difficult or impossible to do independently at this time?
- What tasks is the child expected to complete (consider communication, instruction, participation, independence, productivity, and environmental control)? What equipment and materials will the child be using?
- What are the environments the child will be in (e.g., classroom, lunchroom, playground, gym, home)? How do the tasks the child is expected to complete vary in each environment?
- What are the physical layouts of the building, classroom, and other areas of the school the child will be accessing?

- What type of AT would be of benefit to the child? What devices have been tried? What was their effectiveness?
- What specific device among the options tried is appropriate?
- Address the use of AT in evaluation process
    - All evaluations:
        - to determine eligibility
        - state and local assessments
        - classroom assessments

AT/AAC and IEP Development
Assistive technology can be a part of the annual goals and short-term objectives in an IEP, but there must be a certain degree of specificity in the goal in order for the role of assistive technology to be clear. Goals and short-term objectives/benchmarks that incorporate assistive technology should reflect how assistive technology will serve as a tool in meeting the goal. For example, an IEP goal for a student with a communication disability may look like this:

> *Using an electronic communication device, David will relate experiences in*
> *a specific sequence 5 times out of 5 opportunities over 5 consecutive days.*

The assistive technology device and service can be listed in the Adaptations section of the IEP. An accommodation refers to the necessity to modify a task or an assignment so that the student can compensate for the skills that he/she does not have. For example, the student mentioned above can still tell stories using a communication device.

Assistive technology is necessary as a supplementary aid if it supports the student sufficiently to maintain the placement, and its absence would require the student to be placed in a more restrictive setting.
The following questions should be considered when developing the IEP:
- Is AT needed for a child to make reasonable progress toward achieving his/her goals?
- What assistive technology device is required for the child to meet one or more of the goals on the IEP? (Name the device type, rather than brand or specific name)
- Are assistive technology services needed to enable the child to use the device? (Customizing and maintaining devices, coordinating services, and training the child, family or educational personnel should be considered.)
- Can the child's AT needs be met with special education, a related service, or a supplementary aid or services to facilitate the child's education in the general education setting?
- What is the schedule for reviewing progress toward the goals and objectives that involve AT?
- What actions need to be taken to ensure that the assistive technology identified by the IEP team is used effectively?
- Who is responsible for each of these actions? Do all personnel understand their responsibilities and have the skills necessary to support the student using assistive technology?

AT/AAC Implementation
The effectiveness of the AT in assisting students to achieve their goals should be assessed regularly. The following questions could assist in progress monitoring:
- Has the AT device and/or service been effective?
- Are the assistive technology devices and/or services that were provided being utilized?
- Are the assistive technology devices and/or services functioning as expected?
- For students who are at post-secondary age, have the student's future AT needs been considered?

When a student with disabilities uses assistive technology to perform either in the classroom setting or to accomplish activities of daily living, the IEP team should consider the use of assistive technology in transition planning. When considering needed transition services for any student using AT, the IEP team should consider the following:

- Use of AT during transition services
  - o Are any changes needed in the student's AT devices as a result of the transition services?
  - o Who will ensure effective use of AT?
- Student advocacy
  - o What information and experience does the student need to be able to use, trouble-shoot his/her AT devices and advocate for their use?
- Use of AT after graduation or exit from K-12 education
  - o What AT devices and services will be needed?
  - o Who will be responsible for purchasing and maintaining of the devices?
  - o Can any AT devices the student uses in K-12 education be transferred to transition and adult services? If so, are manuals and other support documents available? Should insurance be purchased?

Effective transition planning involves a collaborative effort that involves the participation of the student, parents, and professionals from the educational setting and community agencies working together to ensure that the assistive technology needs of the student are addressed so that the student's level of independence and function is maintained in the post-school setting.

Additional Resources on Assistive Technology
- Access to the General Education Curriculum
  http://www.dpi.state.nd.us/speced1/educators/curriculum.shtm
- Funding AAC devices http://www.asha.org/NJC/faqs-funding.htm

Medicaid

According to the Centers for Medicare and Medicaid (CMS), Medicaid is a jointly funded program between the federal and state governments to assist states in providing medical care to low-income individuals and those who are categorized as medically needy. Under this health insurance program, speech-language pathology and audiology services and related devices are covered for children as long as they are deemed medically necessary. Documentation of medical necessity is required for all Medicaid services, regardless of where those services are being provided. This also holds true for devices and equipment. Medicaid is a critical source of health care coverage for children.

The Early and Periodic, Screening, Diagnostic, and Treatment (EPSDT) provision is Medicaid's comprehensive and preventive child health program for individuals under the age of 21. The Medicaid statute requires that states provide any medically necessary health care services listed in section 1905(a) of the Social Security Act (the Act) to an EPSDT recipient even if the services are not available under the state's Medicaid plan to the rest of the Medicaid population (i.e., not all states are equivalent in covered services).

Medicaid is administered directly by states. Each state's Medicaid Plan outlines how a district may use Medicaid revenue. The federal Medicaid program encourages states to use funds from their Medicaid program to help pay for certain health care services that are delivered in the schools, providing that federal regulations are followed.

For some children, schools are the primary point of entry to receiving needed health and social services. *However, only those medically necessary IDEA services that are described in the definition of "medical assistance" can be covered as Medicaid services when furnished by qualified participating Medicaid providers.*

Definitions of Medical Necessity

Medical Necessity For Speech-Language Pathology And Audiology Services, published by the American Speech-Language-Hearing Association in 2004, provides the CMS definition of medical necessity as a "service that is reasonable and necessary for the diagnosis or treatment of an illness or injury, or to improve the functioning of a malformed body member." The service must be consistent with the symptoms of the illness or injury, be provided within generally acceptable professional medical standards, not performed for the convenience of the patient or physician, and furnished at a safe level and in a setting appropriate to the patient's medical needs.

ASHA's position is that speech-language pathology and audiology services are medically necessary to treat speech-language, swallowing, hearing, and balance disorders. Many of these disorders have a neurological basis and result from specific injury and illness, such as head injury and cerebral palsy.

Speech-language pathologists and audiologists must document how the services they provide are medically necessary in order to be reimbursed by health plans. Determining medical necessity takes into consideration whether a service is essential and appropriate to the diagnosis and/or treatment of an illness or injury. Illness is defined as "disease," which can be further defined as a disorder of body function. Loss of hearing, impaired speech and language, and swallowing difficulties all reflect a loss of body function. Therefore, services to treat such impairments must be regarded as meeting the definition of medical necessity.

> *Medicare policy manuals have provided useful guidelines in providing documentation of medical necessity. Claims for speech-language pathology and audiology services should be supported by the following basic elements of coverage:*
> - *Reasonable: provided with appropriate amount, frequency, and duration, and accepted standards of practice*
> - *Necessary: appropriate treatment for the patient's diagnosis and condition*
> - *Specific: targeted to particular treatment goals*
> - *Effective: expectation for improvement within a reasonable time*
> - *Skilled: requires the knowledge, skills and judgment of a speech-language pathologist.*

<p align="center">Lusis, I., & McCarty, J. (2006, May 2). Medical Necessity and Medicaid. The ASHA Leader, 11(6), 3, 23.</p>

According to the *Medical Necessity For Speech-Language Pathology and Audiology Services,* ASHA 2004, states that the criteria for evaluating definitions of medical necessity include:
1. The definition should incorporate appropriate outcomes within a developmental framework.
2. The definition should address the information needed in the decision-making process, and who will participate in that process.
3. The definition should refer to specific standards.
4. The definition should support flexibility in the sites of service delivery.

Qualifications

Medicaid will reimburse for Medicaid speech-language pathology services if they are delivered by a ND licensed SLP. In North Dakota, an SLP must be licensed by the ND Board of Examiners on Audiology and Speech-Language Pathology to be reimbursed by Medicaid. The school district may not bill for services performed by a speech-language pathology assistant. Medicaid regulations [42 CFR 440.110 (c)] state the definition as follows: (2) A "speech pathologist is an individual who:
- Has a certificate of clinical competence from the American Speech and Hearing Association;
- Has completed the equivalent educational requirements and work experience necessary for the certificate; or
- Has completed the academic program and is acquiring supervised work experience to qualify for the certificate."

Resources
For more information concerning Medicaid services in the public schools, refer to the following resources:
- Centers for Medicaid and Medicare Services (CMS) May 2003 document: *Medicaid School-Based Administrative Claiming Guide* http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and -Systems/MedicaidBudgetExpendSystem/Downloads/Schoolhealthsvcs.pdf
- Medicaid Payment for School-Based Services FAQs: The Audiologist's and SLP's Role http://www.asha.org/Practice/reimbursement/medicaid/school-based_services/
- North Dakota Department of Human Services, Medical Services Division; Telephone: (701) 328-2321; Toll-free:1-800-755-2604; Website: http://www.nd.gov/dhs/services/medicalserv/medicaid; E-mail: dhsmed@nd.gov

Supervision

Most school speech-language pathologists will be providing supervision to others as a part of their role in case management and the provision of services to the children they serve. This may involve supervising graduate students in the educational process, clinical fellows, other speech-language pathologists (SLPs) or special educators, and perhaps speech-language pathology assistants (SLPAs). In North Dakota, SLPAs are referred to as speech-language pathology paraprofessionals (SLPPs), and by administrative rule, these individuals are required to have a certificate of completion and be supervised be a North Dakota educationally certificated or licensed speech-language pathologist. The SLP must also have at least one year of experience since receiving the certificate or license before supervising a SLPP and may not supervise more than two SLPPs at one time. The role of the SLPP is restricted and defined in the administrative rule. For example, the SLPP may not complete evaluations, develop program plans, prepare or sign any formal documentation, or make any independent case management decisions. There are specific best practices guidelines that define minimum levels of both direct and indirect supervision. Direct supervision means on-site, in-view observation and guidance by the supervising SLP. Indirect supervision includes activities such as demonstration, record review, and review and evaluation of audio or videotaped sessions.

The following link provides additional information about the rule and the Certificate of Completion: http://www.dpi.state.nd.us/speced1/educators/certcomp.pdf. The ND Department of Public Instruction has also developed a best practices document that answers specific questions about the role and supervision of these SLPPs: http://www.dpi.state.nd.us/speced1/educators/slpara.pdf.

Many SLPs do not have formal training or preparation in supervision. North Dakota does not require formal training but strongly recommends that an SLP who supervises an SLPP have at least 10 hours of continuing education in supervisory practice. The American Speech-Language-Hearing Association (ASHA) recognizes the importance and complexity involved in the supervisory process, and has developed several resources that will assist the SLP who wishes to explore this area of practice in more detail. It is important that SLPs develop the knowledge and skills needed for this area of practice if they are engaged in any form of clinical supervision. The following link to the ASHA web site provides additional information about clinical supervision including a technical report that highlights key principles and issues that reflect the importance and the highly skilled nature of providing exemplary supervision. It also includes the document *Knowledge and Skills Needed by Speech-Language Pathologists Providing Clinical Supervision* and the Position statement *Clinical Supervision in Speech-Language Pathology:* http://www.asha.org/academic/teach-tools/supervision-resources.htm

ASHA also provides specific information about the supervision of SLPAs including:
Position Statement:
http://www.asha.org/docs/html/PS2004-00119.html

Guidelines for the Training, Use and Supervision of Speech-Language Pathology Assistants:
http://www.asha.org/docs/html/GL2004-00054.html

Knowledge and Skills for Supervisors of Speech-Language Pathology Assistants:
http://www.asha.org/docs/html/KS2002-00031.html

Telepractice

The American Speech-Language-Hearing Association (ASHA) position statement on telepractice defines this type of service delivery as "the application of telecommunications technology to deliver professional services at a distance by linking clinician to client, or clinician to clinician for assessment, intervention, and/or consultation" (ASHA, 2005). It is the position of ASHA that telepractice is an appropriate model of service delivery for provision of speech-language services, particularly in extending services to rural or underserved populations, and to culturally and linguistically diverse populations. In delivering services via telepractice, the SLP still must adhere to the Code of Ethics, Scope of Practice, and state and federal laws (e.g., licensure, HIPAA, etc.).

For SLPs who will be working in the area of telepractice, it is critical that they possess the knowledge and skills needed for this specific area of practice. ASHA has a practice document that outlines the information and the specific skills needed for practitioners who will be providing services via telepractice. This document is available at: http://www.asha.org/docs/html/KS2005-00077.html

American Speech-Language-Hearing Association. (2005). *Knowledge and Skills Needed by Speech-Language Pathologists Providing Clinical Services via Telepractice* [Knowledge and Skills]. Available from www.asha.org/policy.

Another helpful document is *Professional Issues in Telepractice for Speech-Language Pathologists* (ASHA, 2010). Information includes definitions of common concepts related to telepractice and a summary of current ASHA practice documents related to this area. There is also information concerning establishing criteria for candidacy, defining expected outcomes, developing evidence-based and appropriate telepractice clinical protocols, providing staff education and training, and methods for evaluating outcomes and the effectiveness of services. Unique issues related to environment, use of facilitators, privacy and confidentiality issues, and documentation are addressed.

For districts considering telepractice, it is important to consider the need for administrative support when providing services via telepractice since there are specific resources needed to effectively deliver services in this manner. There are unique problems related to equipment (purchase and maintenance), professional and support staff training, communication with stakeholders (including families), and managing risks with this type of service delivery. (American Speech-Language-Hearing Association, 2010. *Professional Issues in Telepractice for Speech Language Pathologists* [Professional Issues Statement]. Available from www.asha.org/policy)

Since this is a rapidly changing area of practice, the SLP has a specific responsibility to stay current on the most recent research evidence in this area in order to ensure that the quality of services delivered via telepractice is consistent with the quality of services delivered face-to-face.

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Wisconsin Department of Public Instruction. (2003). *Speech and Language Impairments Assessment and Decision Making Technical Assistance Guide.*

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